Appendix J

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD SAN DIEGO REGION

ORDER NO. 99-72 NPDES PERMIT NO. CA0107981

WASTE DISCHARGE REQUIREMENTS FOR THE CITY OF ESCONDIDO HALE AVENUE RESOURCE RECOVERY FACILITY

DISCHARGE TO THE PACIFIC OCEAN VIA THE ESCONDIDO LAND OUTFALL AND THE SAN ELIJO OCEAN OUTFALL

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The California Regional Water Quality Control Board, San Diego Region (hereinafter referred to as Regional Board) finds that:

- 1. On March 23, 1981, this Regional Board adopted Order No. 81-10, NPDES No. CA0107981, Waste Discharge Requirements for the City of Escondido Hale Avenue Wastewater Treatment Facility, San Diego County. Order No. 81-10, and Addendum No. 1 thereto, established requirements for the discharge of up to 16.5 million gallons per day (MGallons/Day) of treated wastewater from the City of Escondido Hale Avenue Wastewater Treatment Facility to the Pacific Ocean via the Escondido Land Outfall and the San Elijo Ocean Outfall. Order No. 81-10 contained an expiration date of March 23, 1986.
- 2. On June 6, 1988, this Regional Board adopted Order No. 88-04, NPDES No. CA0107981, Waste Discharge Requirements for the City of Escondido Hale Avenue Water Pollution Control Facility Discharge Through the San Elijo Ocean Outfall, San Diego County, superseding Order No. 81-10. Order No. 88-04, and Addenda Nos. 1, 2, and 3 thereto, established requirements for the discharge of up to 17.5 MGallons/Day of treated wastewater from the Hale Avenue Water Pollution Control Facility to the Pacific Ocean via the Escondido Land Outfall and the San Elijo Ocean Outfall, provided that certain conditions were met¹. Monitoring and Reporting Program No. 81-10 remained in effect with the adoption of Order No. 88-04, as no new monitoring and reporting program was issued with Order No. 88-04. Order No. 88-04, as amended by Addendum No. 3, contained an expiration date of June 6, 1993.

- 3. On November 10, 1994, this Regional Board adopted Order No. 94-104, NPDES No. CA0107981, Waste Discharge Requirements for the City of Escondido Hale Avenue Resource Recovery Facility Discharge to the Pacific Ocean Via the Escondido Land Outfall and San Elijo Ocean Outfall, superseding Order No. 88-04. Order No. 94-104 established requirements for the discharge of up to 16.5 MGallons/Day of treated wastewater from the Hale Avenue Resource Recovery Facility (HARRF) to the Pacific Ocean via the Escondido Land Outfall to the San Elijo Ocean Outfall. On July 1, 1995 Technical Change Order No.1 substituted Monitoring and Reporting Program 94-104 in its entirety.
- 4. On April 30, 1999, the City of Escondido submitted a deficient application for the renewal of its NPDES permit pursuant to Reporting Requirement No. E.2 of Order No. 94-104. On June 10, 1999, the City of Escondido re-submitted a revised application, and after minor revisions on August 23,1999, the application was determined to be complete.
- 5. This Order is a renewal of NPDES permit No. CA010791 and supersedes Order No. 94-104. This Order expires November 10, 2004.
- 6. The HARRF is a publicly owned treatment works (POTW) owned by the City of Escondido which treats residential, commercial, and industrial wastewater generated in the City of Escondido and in the Rancho Bernardo portion of the City of San Diego. The City of San Diego has contracted with the City of Escondido for treatment of up to 5.5 MGallons/Day of wastewater from Rancho Bernardo at the HARRF.
- 7. The HARRF is located at 1521 Hale Avenue in the City of Escondido, adjacent to Escondido Creek.
- 8. Wastewater treatment unit operations and processes at the HARRF consist of preliminary treatment by screening, grit removal, primary sedimentation using clarifiers, and biological treatment using activated sludge followed by secondary clarification. Sludge is thickened by dissolved air floatation, anaerobically digested, and mechanically dewatered. Final sludge disposal is by offsite reuse and/or disposal in a landfill.
- 9. The City of Escondido is completing construction of tertiary treatment facilities for the HARRF to reclaim wastewater for beneficial use. Tertiary treatment will include coagulation and flocculation, filtration, and disinfection. The discharge of reclaimed water for beneficial use is regulated by State Waste Discharge Requirements in this Regional Board's Order No. 93-70, Waste Discharge Requirements for the City of Escondido Hale Avenue Regional Reclamation Facility, San Diego County.

- 10. On September 9, 1998, this Regional Board adopted Order No. 98-10, NPDES No. CA010944, Waste Discharge Requirements for the City of Escondido's Hale Avenue Resource Recovery Facility, Intermittent Wet Weather Discharge to Escondido Creek, San Diego County. Order No. 98-10 establishes requirements under which the City of Escondido could, during extreme hydrologic events (estimated to be at least a 2-year storm), discharge disinfected tertiary-treated reclaimed water into Escondido Creek. To offset the fact that nutrients will not be removed from the reclaimed water; the City of Escondido intends to initiate a nutrient removal program by November 2000, whereby the City will divert surface water runoff that would otherwise reach the lagoon, from a concrete lined channel directly to the outfall. This diversion would compensate for the nutrient loading that may occur from the intermittent wet weather dicharge.
- 11. The HARRF's Report of Waste Discharge indicates that the average dry-weather flow rate from the HARRF is approximately 15.9 MGallons/Day. According to information provided by the discharger, approximately 3.8 MGallons/Day of the average flow rate originates from the City of San Diego's Rancho Bernardo portion of the service area.
- 12. Effluent from the HARRF is discharged to the Pacific Ocean through the San Elijo Ocean Outfall (SEOO) via the Escondido Land Outfall (ELO). The ELO is owned by the City of Escondido. The SEOO is owned by the San Elijo Joint Powers Authority (SEJPA), and 79% of the SEOO capacity is leased to the City of Escondido. The discharge through the SEOO from the SEJPA is regulated by a separate NPDES permit (NPDES No. CA0107999). Both permits discharging to the SEOO share the same receiving water limitations and Monitoring and Reporting Program requirements.
- 13. The ELO extends from the HARRF southwesterly approximately 14 miles to its junction with the SEOO, generally following Escondido Creek. The hydraulic design capacity of the ELO is 27.6 MGallons/Day.
- 14. The SEOO extends southwesterly from a point approximately 2,200 feet south of the mouth of San Elijo Lagoon. The inshore end of the diffuser is located approximately 6,800 feet offshore at a depth of approximately 110 feet. The diffuser, which is collinear with the outfall, is approximately 1,200 feet long and extends to a depth of approximately 148 feet. The terminus of the diffuser is located at Latitude 33° 00' 21" North, Longitude 117° 18' 9" West.
- 15. The design capacity of the SEOO is 25.5 MGallons/ Day. The current operating capacity of the SEOO is approximately 24.3 MGallons/ Day. The addition of 1.55 MGallons/Day to the SEWRF's previously permitted 3.7, in combination with the

City of Escondido's permitted 16.5 MGallons/Day results in a net discharge of 21.75 MGallons/Day to the SEOO. Based on characteristics of the SEOO, State Water Resources Control Board (SWRCB) staff has determined the minimum initial dilution for the SEOO, with 200 diffuser ports open and a flowrate of 24 MGallons/ Day, to be 220, using the computer model UMERGE.

- 16. The SWRCB adopted a revised <u>Water Quality Control Plan for Ocean Waters of California (California Ocean Plan)</u> on July 23, 1997. The Ocean Plan identifies the following beneficial uses of state ocean waters to be protected:
 - a. Industrial water supply
 - b. Navigation
 - c. Water contact recreation
 - d. Non-contact water recreation
 - e. Ocean commercial and sport fishing
 - f. Preservation and enhancement of Areas of Special Biological Significance
 - g. Preservation of rare and endangered species
 - h. Marine habitat
 - i. Mariculture
 - j. Fish migration
 - k. Fish spawning
 - I. Shellfish harvesting
 - m. Aesthetic enjoyment

In order to protect these beneficial uses, the Ocean Plan establishes water quality objectives (for bacterial, physical, chemical, and biological characteristics, and for radioactivity), general requirements for management of waste discharge to the ocean, quality requirements for waste discharges (effluent water quality requirements), discharge prohibitions, and general provisions.

- 17. The <u>Comprehensive Water Quality Control Plan Report, San Diego Basin (9)</u>, (Basin Plan) was adopted by this Regional Board on March 17, 1975 and subsequently approved by the SWRCB. Subsequent revisions to the Basin Plan have also been adopted by the Regional Board and approved by the SWRCB.
- 18. The Basin Plan identifies the following beneficial uses of state ocean waters to be protected:

- a. Industrial service supply
- b. Navigation
- c. Water contact recreation
- d. Noncontact water recreation
- e. Ocean commercial and sport fishing
- f. Preservation of Areas of Special Biological Significance (ASBS)
- g. Preservation of rare and endangered species
- h. Marine habitat
- i. Mariculture
- j. Fish migration
- k. Fish spawning
- I. Shellfish harvesting
- m. Wildlife habitat

The Basin Plan relies primarily on the requirements of the Ocean Plan for protection of these beneficial uses. The Basin Plan, however, establishes additional water quality objectives for dissolved oxygen and pH.

19. The 1997 Ocean Plan states that, "Water shall not be discharged to areas designated as being of special biological significance. Discharges shall be located a sufficient distance from such designated areas to assure maintenance of natural water quality conditions in that area."

The marine habitat beneficial use identified in both the Ocean Plan and Basin Plan provides for the preservation of the marine ecosystem in the City of Encinitas Marine Life Refuge. The City of Encinitas Marine Life Refuge, described in Fish and Game Code Section 10913, is located approximately 11,000 feet northeast of the inshore end of the SEOO diffuser. The refuge is generally bounded to the north by the westerly prolongation of the northerly right-of-way line of D Street, and to the south by the southwesterly prolongation of the southeasterly line of Lot N in Block 3 of Resubdivision of Sea Cliff Villa in the City of Encinitas, and includes submerged lands and ocean waters 600 feet west of the mean high tide line.

Regional Board staff's review of the monitoring data submitted by the discharger in accordance with the Monitoring and Reporting Program of Order No. 94-104

have not revealed any impacts on the City of Encinitas Marine Life Refuge resulting from the SEOO discharge. No impacts to the refuge area are expected to occur in the future.

- 20. Receiving Water Limitation No. C.1.a. (2) of this Order establishes bacterial objectives for areas where shellfish may be harvested for human consumption, as determined by the Regional Board. However, as of the date of adoption of this Order, this Regional Board has not designated any shellfish harvesting area. If and when this Regional Board, in consultation with the Department of Fish and Game, health agencies, and other interested parties, does designate shellfish harvesting areas in the vicinity of this discharge, this Order will be amended to identify the area(s) to which Receiving Water Limitation No. C.1.a. (2) applies.
- 21. Federal regulations (40 CFR Part 403) establish pretreatment program requirements for POTWs that receive pollutants from industries subject to pretreatment standards. This Order contains industrial pretreatment program requirements pursuant to 40 CFR Part 403. (See Pretreatment Requirements, Section D.)
- 22. On March 28, 1983, the United States Environmental Protection Agency (USEPA), Region 9, granted final industrial pretreatment program approval to the City of Escondido. On June 29, 1982, USEPA Region 9 granted final industrial pretreatment program approval to the City of San Diego. Because up to 5.3 MGallons/Day of wastewater from the Rancho Bernardo service area can be discharged to the City of Escondido's treatment facility, it was agreed, through a Memorandum of Agreement dated February 15, 1995, that administrative implementation of the pretreatment program in the Rancho Bernardo area of San Diego is the responsibility of the City of San Diego.
- 23. On April 30, 1998, a line break occurred in a 20-inch diameter force main that conveys domestic and industrial wastewater from the Rancho Bernardo service area to the HARRF, resulting in a discharge of 1,560,000 gallons of untreated sewage into Lake Hodges, a local domestic water supply. In conjunction with the City of Escondido, the City of San Diego has implemented additional steps and procedures to ensure against failure of the wastewater pipeline to the HARRF. A telemetry system has been installed that reports line pressure to the operations staff, and coordination efforts with the City of Escondido have been improved, in order to further reduce the possibility of a spill into Lake Hodges.
- 24. On November 16, 1990, the USEPA promulgated NPDES permit application requirements for storm water discharges (40 CFR Parts 122, 123, and 124) which are applicable to the HARRF. On November 19, 1991, the State Water Resources Control Board adopted Water Quality Order No. 91-13-DWQ, National

Pollutant Discharge Elimination System (NPDES) General Permit No. CAS000001, <u>Waste Discharge Requirements for Discharges of Storm Water Associated With Industrial Activities Excluding Construction Activities</u>. Storm water discharges from the HARRF are subject to the terms and conditions of Water Quality Order No. 91-13-DWQ, as amended.

- 25. Municipal storm water discharges are regulated separately under NPDES Order No. 90-42 (CA0108758), Waste Discharge Requirements for Storm Water and Urban Runoff from the County of San Diego, the Incorporated Cities of San Diego County, and the San Diego Unified Port District. The City of Escondido is considered a co-permittee participant in this permit, which is currently scheduled for renewal.
- 26. On February 19, 1993, the USEPA issued the final rule for the use and disposal of sewage sludge (40 CFR Part 503). This regulation requires that producers of sewage sludge meet certain reporting, handling, and disposal requirements. The USEPA, not this Regional Board, oversees compliance with 40 CFR Part 503.
- 27. Section 301(b)(1)(B) of the Clean Water Act (CWA) requires POTWs to meet effluent limitations based on secondary treatment as defined by the USEPA Administrator. Secondary treatment is defined by the USEPA Administrator in the federal regulations (40 CFR Part 133.100 to 40 CFR Part 133.105) in terms of three parameters: 5-day biochemical oxygen demand (BOD₅), total suspended solids (TSS), and pH. Federal regulations allow substitution of 5-day carbonaceous biochemical oxygen demand (CBOD₅) limitations for BOD₅: limitations. On June 20, 1988, the City of Escondido submitted a Report of Waste Discharge, requesting that the City's discharge specifications for BOD₅ be changed to CBOD₅. Addendum No. 2 to Order No. 88-04 substituted CBOD₅ effluent limitations for BOD₅ limitations. Discharge Specification B.1.a. of this Order establishes effluent limitations for CBOD₅, TSS, and pH in accordance with federal secondary treatment regulations. In addition, Discharge Specification B.1.a of this Order establishes "Maximum at Any Time" limitations for CBOD₅ and TSS and the Monitoring and Reporting Program of this Order establishes effluent monitoring requirements for both CBOD₅ and BOD₅. Mass emission rate (MER) limitations are based on a flow rate of 16.5 MGallons/Day.
- 28. Monitoring and Reporting Program No. 99-72 may be subject to changes during the 5 -year period of this permit. The Southern California Coastal Water Research Project (SCCWRP) is currently investigating more effective techniques to monitor receiving waters of the Pacific Ocean. Once the SCCWRP study is complete, these methods may be incorporated into this Order's Monitoring and Reporting Program through an Addendum to this Order.

- 29. Effluent limitations, industrial pretreatment standards, sludge use and disposal regulations, and ocean discharge criteria established under Sections 208(b), 301, 302, 303(d), 304, 306, 307, 403, and 405 of the CWA, as amended (Title 33 United States Code (USC) 1251 et seq.), are applicable to the discharge.
- 30. Waste discharge requirements for this discharge must be in conformance with 40 CFR 131.12 and State Board Resolution No. 68-16, Statement of Policy with Respect to Maintaining High Quality of Waters in California (known collectively as "antidegradation" policies). Since effluent concentration and mass emission rate limitations in this Order have been derived according to 1997 Ocean Plan procedures, adoption of this Order is consistent with antidegradation policies.
- 31. The Regional Board, in establishing the requirements contained herein, considered factors including, but not limited to, the following:
 - a. Beneficial uses to be protected and the water quality objectives reasonably required for that purpose;
 - b. Other waste discharges;
 - c. The need to prevent nuisance;
 - d. Past, present, and probable future beneficial uses of water;
 - e. Environmental characteristics of the receiving waters under consideration, including the quality of those receiving waters;
 - f. Water quality conditions that could reasonably be achieved through the coordinated control of all factors which affect water quality in the area;
 - g. Economic considerations
 - h. The need for developing housing within the region; and
 - i. The need to develop and use recycled water.
- 32. The issuance of waste discharge requirements for this discharge is exempt from the requirement for preparation of environmental documents under the California Environmental Quality Act (Public Resources Code, Division 13, Chapter 3, Section 21000 et seq.) in accordance with the California Water Code, Section 13389.
- 33. The Regional Board has notified the City of Escondido and all known interested

- parties of its intent to reissue the NPDES permit for the discharge from the Hale Avenue Resource Recovery Facility to the Pacific Ocean.
- 34. The Regional Board, in a public hearing held November 10, 1999, has heard and considered all comments pertaining to the discharge from the Hale Avenue Resource Recovery Facility to the Pacific Ocean via the Escondido Land Outfall and the San Elijo Ocean Outfall.
- 35. This Order shall serve as a National Pollutant Discharge Elimination System (NPDES) Permit for the discharge from the City of Escondido Hale Avenue Resource Recovery Facility to the Pacific Ocean pursuant to Section 402 of the Clean Water Act, and amendments thereto.

IT IS HEREBY ORDERED that the City of Escondido (hereinafter discharger), in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder and the provisions of the Clean Water Act and the regulations adopted thereunder, shall comply with the following for the handling, treatment, and disposal of wastes through the San Elijo Ocean Outfall from the City of Escondido Hale Avenue Resource Recovery Facility:

A. PROHIBITIONS

- Discharges of wastes in a manner or to a location which have not been specifically authorized by this Order and for which valid waste discharge requirements are not in force are prohibited.
- 2. The dumping or deposition, from shore or from vessels, of oil, garbage, trash or other solid municipal, industrial, or agricultural waste directly into waters subject to tidal action or adjacent to waters subject to tidal action in any manner which may permit it to be washed into waters subject to tidal action is prohibited.
- 3. Compliance with Discharge Prohibitions as stated in Chapter V of the 1997 Ocean Plan, and listed in Attachment 1 hereto, is required as a condition of this Order.
- 4. Compliance with Waste Discharge Prohibitions contained in the 1994 Basin Plan (Attachment 2) is also required as a condition of this Order.
- 5. Discharge to the Pacific Ocean from the Hale Avenue Resource Recovery Facility via the Escondido Land Outfall and San Elijo Ocean Outfall in excess of 16.5 MGallons/Day is prohibited unless the discharger obtains the approval of the Regional Board for a revised design capacity in accordance with Provision F.13 of this Order.

B. DISCHARGE SPECIFICATIONS

1. The following effluent limitations apply to the undiluted effluent discharged from the Hale Avenue Resource Recovery Facility through the San Elijo Ocean Outfall.

a. Effluent Limitations for Major Constituents and Properties of Wastewater

| Constituent/ Property | Units | Monthly Average (30 day) | Weekly Average (7 day) | Maximum at any time |
|---------------------------------------|----------------|--------------------------------|------------------------------|---------------------|
| CBOD ₅ ² | mg/L lb/Day | 25 3,400 | 40 5,500 | 45 6,200 |
| total suspended solids ^{2,3} | mg/L lb/Day | 30 4,100 | 45 6,200 | 50 6,900 |
| oil & grease ³ | mg/L lb/Day | 25 3,400 | 40 5,500 | 75 10,000 |
| settleable solids ³ | mL/L | 1.0 | 1.5 | 3.0 |
| turbidity ³ | NTU | 75 | 100 | 225 |
| PH ^{2,3} | pH units | Within lin | nits of 6.0 - 9 | .0 at all times. |
| acute toxicity ³ | TUa | 1.5 | 2.0 | 2.5 |

b. Effluent Limitations on Toxic Materials for Protection of Marine Aquatic Life⁴

| Constituent/ | Units | 6-Month | Daily | Instantaneous |
|--------------------------------------|--------|---------|---------|---------------|
| Property | | Median | Maximum | Maximum |
| arsenic | ug/L | 1,100 | 6,400 | 17,000 |
| | lb/Day | 150 | 880 | 2,300 |
| cadmium | ug/L | 220 | 880 | 2,200 |
| | lb/Day | 30 | 120 | 300 |
| chromium (hexavalent) ⁵ | ug/L | 440 | 1,800 | 4,400 |
| | lb/Day | 61 | 240 | 610 |
| copper | ug/L | 220 | 2,200 | 6,200 |
| | lb/Day | 31 | 300 | 850 |
| lead | ug/L | 440 | 1,800 | 4,400 |
| | lb/Day | 61 | 240 | 610 |
| mercury | ug/L | 8.7 | 35 | 88 |
| | lb/Day | 1.2 | 4.9 | 12 |
| nickel | ug/L | 1,100 | 4,400 | 11,000 |
| | lb/Day | 150 | 610 | 1,500 |
| selenium | ug/L | 3,300 | 13,000 | 33,000 |
| | lb/Day | 460 | 1,800 | 4,600 |
| silver | ug/L | 64 | 360 | 960 |
| | lb/Day | 8.8 | 50 | 130 |
| zinc | ug/L | 2,700 | 16,000 | 42,000 |
| | lb/Day | 370 | 2,200 | 5,800 |
| cyanide ⁶ | mg/L | 0.22 | 0.88 | 2.2 |
| | lb/Day | 30 | 120 | 300 |
| total chlorine residual ⁷ | mg/L | 0.44 | 1.8 | 13 |
| | lb/Day | 61 | 240 | 1,800 |
| ammonia (as N) | mg/L | 130 | 530 | 1,300 |
| | lb/Day | 18,000 | 73,000 | 180,000 |
| chronic toxicity | TUc | | 200 | · |
| phenolic compounds | mg/L | 6.6 | 27 | 66 |
| (non-chlorinated) | lb/Day | 910 | 3,600 | 9,100 |

| Constituent/ | Units | 6-Month | Daily | Instantaneous |
|-----------------------------|---|---------|---------|---------------|
| Property | | Median | Maximum | Maximum |
| chlorinated phenolics | mg/L | 0.22 | 0.88 | 2.2 |
| | lb/Day | 30 | 120 | 300 |
| endosulfan ⁸ | ug/L | 1.9 | 4.0 | 6.0 |
| | lb/Day | 0.27 | 0.55 | 0.82 |
| endrin | ug/L | 0.44 | 0.88 | 1.3 |
| | lb/Day | 0.061 | 0.12 | 0.18 |
| HCH ⁹ | ug/L | 0.88 | 1.8 | 2.7 |
| | lb/Day | 0.12 | 0.24 | 0.36 |
| radioactivity ¹⁰ | Not to exceed limits specified in Title 17, Division 1, Chapter 5, Group 3, Article 1, Section 30253 of the California Code of Regulations. | | | 30253 of the |

c. Effluent Limitations for Toxic, Noncarcinogenic Materials for Protection of Human Health⁴

| Constituent/ Property | Units | Monthly Average (30-day) |
|--------------------------------|----------------|-----------------------------|
| acrolein | ug/L lb/Day | 49,000 6,700 |
| antimony | ug/L lb/Day | 270,000 36,000 |
| bis(2-chloroethoxy)methane | ug/L lb/Day | 970 130 |
| bis(2-chloroisopropyl) ether | ug/L lb/Day | 270,000 36,000 |
| chlorobenzene | ug/L lb/day | 130,000 17,000 |
| chromium (III) | ug/L lb/Day | 42,000,000 5,800,000 |
| di-n-butyl phthalate | ug/L lb/Day | 770,000 110,000 |
| dichlorobenzenes ¹¹ | ug/L lb/Day | 1,100,000 160,000 |
| 1,1-dichloroethylene | ug/L lb/Day | 1,600,000 220,000 |
| diethyl phthalate | ug/L lb/Day | 7,300,000 1,000,000 |
| dimethyl phthalate | ug/L lb/Day | 180,000,000 25,000,000 |
| 4,6-dinitro-2-methylphenol | ug/L lb/Day | 49,000 6,700 |
| 2,4-dinitrophenol | ug/L lb/Day | 880 120 |
| ethylbenzene | ug/L lb/Day | 910,000 120,000 |

| | | The state of the s |
|---------------------------|----------------|--|
| Constituent/ Property | Units | Monthly Average (30-day) |
| fluoranthene | ug/L lb/Day | 3,300 460 |
| hexachlorocyclopentadiene | ug/L lb/Day | 13,000 1,800 |
| isophorone | ug/L lb/Day | 33,000,000 4,600,000 |
| nitrobenzene | ug/L lb/Day | 1,100 150 |
| thallium | ug/L lb/Day | 3,100 430 |
| toluene | ug/L lb/Day | 19,000,000 2,600,000 |
| 1,1,2,2-tetrachloroethane | ug/L lb/Day | 270,000 36,000 |
| tributyltin | ug/L lb/Day | 0.31 0.043 |
| 1,1,1-trichloroethane | ug/L lb/Day | 120,000,000 16,000,000 |
| 1,1,2-trichloroethane | ug/L lb/Day | 9,500,000 1,300,000 |

d. Effluent Limitations for Toxic, Carcinogenic Materials for Protection of Human Health⁴

| Health | | |
|----------------------------|----------------|-----------------------------|
| Constituent/ Property | Units | Monthly Average (30-day) |
| acrylonitrile | ug/L lb/Day | 22 3.0 |
| aldrin | ug/L lb/Day | 0.0049 0.00067 |
| benzene | ug/L lb/Day | 1,300 180 |
| benzidine | ug/L lb/Day | 0.015 0.0021 |
| beryllium | ug/L lb/Day | 7.3 1.0 |
| bis(2-chloroethyl)ether | ug/L lb/Day | 10 1.4 |
| bis(2-ethylhexyl)phthalate | ug/L lb/Day | 770 110 |
| carbon tetrachloride | ug/L lb/Day | 200 27 |
| chlordane ¹² | ug/L lb/Day | 0.0051 0.00070 |
| chloroform | ug/L lb/Day | 29,000 4,000 |
| DDT ¹³ | ug/L lb/Day | 0.038 0.0052 |
| 1,4-dichlorobenzene | ug/L lb/Day | 4,000 550 |
| 3,3-dichlorobenzidine | ug/L lb/Day | 1.8 0.25 |
| 1,2-dichloroethane | ug/L lb/Day | 29,000 4,000 |
| dichloromethane | ug/L lb/Day | 99,000 14,000 |

| Constituent/ Property | Units | Monthly Average (30-day) |
|--------------------------------|----------------|-----------------------------|
| 1,3-dichloropropene | ug/L lb/Day | 2,000 270 |
| dieldrin | ug/L lb/Day | 0.0088 0.0012 |
| 2,4-dinitrotoluene | ug/L lb/Day | 570 79 |
| 1,2-diphenylhydrazine | ug/L lb/Day | 35 4.9 |
| halomethanes ¹⁴ | ug/L lb/Day | 29,000 4,000 |
| heptachlor ¹⁵ | ug/L lb/Day | 0.16 0.022 |
| hexachlorobenzene | ug/L lb/Day | 0.046 0.0064 |
| hexachlorobutadiene | ug/L lb/Day | 3,100 430 |
| hexachloroethane | ug/L lb/Day | 550 76 |
| N-nitrosodimethylamin | ug/L lb/Day | 1,600 220 |
| N-nitrosodiphenylamine | ug/L lb/Day | 550 76 |
| PAHs ¹⁶ | ug/L lb/Day | 1.9 0.27 |
| PCBs ¹⁷ | ug/L lb/Day | 0.0042 0.00058 |
| TCDD equivalents ¹⁸ | pg/L lb/Day | 0.86 0.00000012 |
| tetrachloroethylene | ug/L lb/Day | 22,000 3,000 |

| Constituent/ Property | Units | Monthly Average (30-day) |
|--------------------------|----------------|-----------------------------|
| toxaphene | ug/L lb/Day | 0.046 0.0064 |
| trichloroethylene | ug/L lb/Day | 6,000 820 |
| 2,4,6-trichlorophenol | ug/L lb/Day | 64 8.8 |
| vinyl chloride | ug/L lb/Day | 8,000 1,100 |

mg/L = milligrams per liter

ug/L = micrograms per liter

ng/L = nanograms per liter

pg/L = picograms per liter

mL/L = milliliters per liter

NTU = Nephelometric Turbidity Units

TUa = toxic units acute

TUc = toxic units chronic

lb/Day = pounds per day

- 2. Any significant change in waste flow shall be cause for reevaluating effluent quality requirements.
- 3. The 30-day average percent removal of CBOD₅ and TSS shall not be less than 85 percent.
- 4. Waste management systems that discharge to the ocean must be designed and operated in a manner that will maintain the indigenous marine life and a healthy and diverse marine community.
- 5. Waste discharged through the San Elijo Ocean Outfall must be essentially free of:
 - a. Material that is floatable or will become floatable upon discharge.
 - b. Settleable material or substances that form sediments which degrade benthic communities or other aquatic life.
 - c. Substances which will accumulate to toxic levels in marine waters, sediments, or biota.

- d. Substances that significantly decrease the natural light to benthic communities and other marine life.
- e. Materials that result in aesthetically undesirable discoloration of the ocean surface.
- 6. Waste discharged through the San Elijo Ocean Outfall shall be discharged in a manner that provides sufficient initial dilution to minimize the concentrations of substances not removed in treatment.
- 7. Waste that contains pathogenic organisms or viruses should be discharged a sufficient distance from shellfishing and water-contact sports areas to maintain applicable bacterial standards without disinfection. Where conditions are such that an adequate distance cannot be attained, reliable disinfection in conjunction with a reasonable separation of the discharge point from the area of use must be provided. Disinfection procedures that do not increase effluent toxicity and that constitute the least environmental and human hazard should be used.
- 8. All waste treatment, containment and disposal facilities shall be protected against 100year peak stream flows as defined by the San Diego County flood control agency.
- All waste treatment, containment and disposal facilities shall be protected against erosion, overland runoff and other impacts resulting from a 100-year frequency 24hour storm.
- 10. Collected screenings, sludges, and other solids removed from liquid wastes shall be disposed of in a manner approved by the Executive Officer.
- 11. The discharge of substances for which effluent limitations are not established by this Order shall be prevented or, if the discharge cannot be prevented, minimized.

C. RECEIVING WATER LIMITATIONS

1. The discharge of waste through the San Elijo Ocean Outfall shall not, by itself or jointly with any other discharge, cause violation of the following Ocean Plan ocean water quality objectives. Compliance with the water quality objectives shall be determined from samples collected at stations representative of the area within the waste field where initial dilution is completed.

a. <u>Bacterial Characteristics</u>

(1) Water-Contact Standards

Within a zone bounded by the shoreline and a distance of 1,000 feet from the shoreline or the 30-foot depth contour, whichever is further from the shoreline, and in areas outside this zone used for water-contact sports, as determined by the Regional Board, but including all kelp beds, the following bacterial objectives shall be maintained throughout the water column:

- (a) Samples of water from each sampling station shall have a density of total coliform organisms less than 1,000 per 100 ml (10 per ml); provided that not more than 20 percent of the samples at any sampling station, in any 30-day period, may exceed 1,000 per 100 ml (10 per ml), and provided further that no single sample when verified by a repeat sample taken within 48 hours shall exceed 10,000 per 100 ml (100 per ml).
- (b) The fecal coliform density based on a minimum of not less than five samples for any 30-day period shall not exceed a geometric mean of 200 per 100 ml nor shall more than 10 percent of the total samples during any 60-day period exceed 400 per 100 ml.

The "Initial Dilution Zone" of wastewater outfalls shall be excluded from designation as kelp beds for purposes of bacterial standards. Adventitious assemblages of kelp plants on waste discharge structures (e.g., outfall pipes and diffusers) do not constitute kelp beds for purposes of bacterial standards. Kelp beds, for the purpose of the bacterial standards of this Order, are significant aggregations of marine algae of the genera Macrocystis and Nereocystis. Kelp beds include the total foliage canopy of Macrocystis and Nereocystis plants throughout the water column.

(2) Shellfish Harvesting Standards

At all areas where shellfish may be harvested for human consumption, as determined by the Regional Board, the following bacterial objectives shall be maintained throughout the water column:

The median total coliform density shall not exceed 70 per 100 ml, and not more than 10 percent of the samples shall exceed 230 per 100 ml.

b. Bacterial Assessment and Remedial Action Requirements

The requirements listed below shall be used to: 1) determine the occurrence and extent of any impairment of a beneficial use due to bacterial contamination; 2) generate information which can be used in the development of an enterococcus standard; and 3) provide the basis for remedial actions necessary to minimize or eliminate any impairment of a beneficial use.

Measurement of enterococcus density shall be conducted at all stations where measurement of total and fecal coliforms are required. In addition to the requirements of Receiving Water Limitation C.1.a of this Order, if a shore station consistently exceeds a coliform objective or exceeds a geometric mean enterococcus density of 24 organisms per 100 ml for a 30-day period or 12 organisms per 100 ml for a six-month period, the Regional Board may require the discharger to conduct or participate in a survey to determine the source of the contamination. The geometric mean shall be a moving average based on no less than five samples per month, spaced evenly over the time interval. When a sanitary survey identifies a controllable source of indicator organisms associated with a discharge of sewage, the Regional Board may require the discharger and any other responsible parties identified by the Regional Board to take action to control the source.

c. Physical Characteristics

- (1) Floating particulates and grease and oil shall not be visible.
- (2) The discharge of waste shall not cause aesthetically undesirable discoloration of the ocean surface.
- (3) Natural light shall not be significantly reduced at any point outside the initial dilution zone as a result of the discharge of waste.
- (4) The rate of deposition of inert solids and the characteristics of inert solids in ocean sediments shall not be changed such that benthic communities are degraded.

d. Chemical Characteristics

- (1) The dissolved oxygen concentration shall not at any time be depressed more than 10 percent from that which occurs naturally, as a result of the discharge of oxygen-demanding waste materials.
- (2) The pH shall not be changed at any time more than 0.2 units from that which occurs naturally.
- (3) The dissolved sulfide concentration of waters in and near sediments shall not be significantly increased above that present under natural conditions.
- (4) The concentration of substances set forth in Receiving Water Limitation C.3 of this Order in marine sediments shall not be increased to levels which would degrade indigenous biota
- (5) The concentration of organic materials in marine sediments shall not be increased to levels which would degrade marine life.

(6) Nutrient materials shall not cause objectionable aquatic growths or degrade indigenous biota.

e. Biological Characteristics

- (1) Marine communities, including vertebrate, invertebrate, and plant species, shall not be degraded.
- (2) The natural taste, odor, and color of fish, shellfish, or other marine resources used for human consumption shall not be altered.
- (3) The concentration of organic materials in fish, shellfish, or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health.

f. Radioactivity

Discharge of radioactive waste shall not degrade marine life.

- 2. The discharge of waste through the San Elijo Ocean Outfall shall not, by itself or jointly with any other discharge, cause violation of the following Basin Plan ocean water quality objectives:
 - a. The mean annual dissolved oxygen concentration shall not be less than 7.0 mg/L nor shall the minimum dissolved oxygen concentration be reduced below 5.0 mg/L at any time.
 - b. The pH value shall not be depressed below 7.0 nor raised above 8.6.

3. Toxic Materials

The discharge through the San Elijo Ocean Outfall shall not by itself or jointly with any other discharge, cause the following Ocean Plan water quality objectives to be exceeded in the receiving water upon completion of initial dilution, except that limitations indicated for radioactivity shall apply directly to the undiluted waste effluent.

a. Water Quality Objectives for the Protection of Marine Aquatic Life¹⁹

| Constituent | Units | 6 Month | Daily | Instantaneous |
|---|---|---------|---------|---------------|
| | | Median | Maximum | Maximum |
| arsenic | ug/L | 8 | 32 | 80 |
| cadmium | ug/L | 1 | 4 | 10 |
| chromium (hexavalent) | ug/L | 2 | 8 | 20 |
| copper | ug/L | 3 | 12 | 30 |
| lead · | ug/L | .2 | 8 | 20 |
| mercury | ug/L | 0.04 | 0.16 | 0.4 |
| nickel | ug/L | 5 | 20 | 50 |
| selenium | ug/L | 15 | 60 | 150 |
| silver | ug/L | 0.45 | 1.8 | 4.5 |
| zinc | ug/L | 20 | . 80 | 200 |
| cyanide | mg/L | 0.001 | 0.004 | 0.010 |
| total chlorine residual | mg/L | 0.002 | 0.008 | 0.060 |
| ammonia (as N) | mg/L | 0.60 | 2.4 | 6.0 |
| chronic toxicity | TUc | | 1 | |
| phenolic compounds (non-chlorinated) | mg/L | 0.030 | 0.12 | 0.30 |
| chlorinated phenolics | mg/L | 0.001 | 0.004 | 0.010 |
| endosulfan ⁸ | ug/L | 0.009 | 0.018 | 0.027 |
| endrin | ug/L | 0.002 | 0.004 | 0.006 |
| HCH ⁹ | ug/L | 0.004 | 0.008 | 0.012 |
| Radioactivity ¹⁰ | Not to exceed limits specified in Title 17, Division 1, Chapter 5, Subsection 4, Group 3, Article 1, Section 30253 of the California Code of Regulations. | | | |

b. Water Quality Objectives for the Protection of Human Health – Noncarcinogens¹⁹

| Chemical | Units | 30-Day Average |
|--------------------------------|-------|-------------------|
| acrolein | ug/L | 220 |
| antimony | ug/L | 1,200 |
| bis(2-chloroethoxy)methane | ug/L | 4.4 |
| bis(2-chloroisopropyl)ether | ug/L | 1,200 |
| chlorobenzene | ug/L | 570 |
| chromium (III) | ug/L | 190,000 |
| di-n-butyl phthalate | ug/L | 3,500 |
| dichlorobenzenes ¹¹ | ug/L | 5,100 |
| 1,1-dichloroethylene | ug/L | 7,100 |
| diethyl phthalate | ug/L | 33,000 |
| dimethyl phthalate | ug/L | 820,000 |
| 4,6-dinitro-2-methylphenol | ug/L | 220 |
| 2,4-dinitrophenol | ug/L | 4.0 |
| ethylbenzene | ug/L | 4,100 |
| fluoranthene | ug/L | 15 |
| hexachlorocyclopentadiene | ug/L | 58 |
| isophorone | ug/L | 150,000 |
| nitrobenzene | ug/L | 4.9 |
| thallium | ug/L | 14 |
| toluene | ug/L | 85,000 |
| 1,1,2,2-tetrachloroethane | ug/L | 1,200 |
| tributyltin | ug/L | 0.0014 |
| 1,1,1-trichloroethane | ug/L | 540,000 |
| 1,1,2-trichloroethane | ug/L | 43,000 |

c. Water Quality Objectives for the Protection of Human Health – Carcinogens¹⁹

| Chemical | Units | 30-Day Average |
|----------------------------|-------|-------------------|
| acrylonitrile | ug/L | 0.10 |
| aldrin | ug/L | 0.000022 |
| benzene | ug/L | 5.9 |
| benzidine | ug/L | 0.000069 |
| beryllium | ug/L | 0.033 |
| bis(2-chloroethyl)ether | ug/L | 0.045 |
| bis(2-ethylhexyl)phthalate | ug/L | 3.5 |
| carbon tetrachloride | ug/L | 0.90 |
| chlordane ¹² | ug/L | 0.000023 |
| chloroform | ug/L | 130 |
| DDT ¹³ | ug/L | 0.00017 |
| 1,4-dichlorobenzene | ug/L | 18 |
| 3,3-dichlorobenzidine | ug/L | 0.0081 |
| 1,2-dichloroethane | ug/L | 130 |
| dichloromethane | ug/L | 450 |
| 1,3-dichloropropene | ug/L | 8.9 |
| dieldrin | ug/L | 0.000040 |
| 2,4-dinitrotoluene | ug/L | 2.6 |
| 1,2-diphenylhydrazine | ug/L | 0.16 |
| Halomethanes ¹⁴ | ug/L | 130 |
| Heptachlor ¹⁵ | ug/L | 0.00072 |
| hexachlorobenzene | ug/L | 0.00021 |
| hexachlorobutadiene | ug/L | 14 |
| hexachloroethane | ug/L | 2.5 |
| N-nitrosodimethylamine | ug/L | 7.3 |

| Chemical | Units | 30-Day Average |
|--------------------------------|--------|-------------------|
| N-nitrosodiphenylamine | ug/L | 2.5 |
| PAHs ¹⁶ | ug/L | 0.0088 |
| PCBs ¹⁷ | ug/L | 0.000019 |
| TCDD equivalents ¹⁸ | pg/L | 0.0039 |
| tetrachloroethylene | , ug/L | 99 |
| toxaphene | ug/L | 0.00021 |
| trichloroethylene | ug/L | 27 |
| 2,4,6-trichlorophenol | ug/L | 0.29 |
| vinyl chloride | ug/L | 36 |

mg/L = milligrams per liter

ug/L = micrograms per liter

ng/L = nanograms per liter

pg/L = picograms per liter

NTU = Nephelometric Turbidity Unit

TUc = toxic units chronic

D. PRETREATMENT REQUIREMENTS

- 1. The discharger shall be responsible and liable for the performance of all pretreatment requirements contained in 40 CFR Part 403, including any subsequent revisions to 40 CFR Part 403. Where 40 CFR Part 403 or subsequent revisions place mandatory actions upon the discharger, but do not specify a timetable for completion, the discharger shall complete the mandatory actions within six months of the issuance date of this Order, or the effective date of the 40 CFR 403 revisions, whichever comes later. For violations of pretreatment requirements, the discharger shall be subject to enforcement actions, penalties, fines, and other remedies by the USEPA, and/or the Regional Board, as provided in the CWA and/or the Porter-Cologne Water Quality Control Act (CWC).
- 2. The discharger shall implement and enforce its approved pretreatment program, and all subsequent revisions, which are hereby made an enforceable condition of this Order. The discharger shall enforce the requirements promulgated under Sections 307(b), 307(c), 307(d), and 402(b) of the CWA with timely, appropriate, and effective enforcement actions. The discharger shall cause industrial users subject to federal categorical standards to achieve compliance no later than the date specified in those requirements, or in the case of a new industrial user, upon commencement of the discharge.

- 3. The discharger shall perform the pretreatment functions as required in 40 CFR 403 including, but not limited to:
 - a) Implement the necessary legal authorities as provided in 40CFR403.8(f)(1);
 - b) Enforce the pretreatment requirements under 40CFR403.5 and 403.6;
 - c) Implement the programmatic functions as provided in 40CFR403.8(f)(2); and
 - d) Provide the requisite funding and personnel to implement the pretreatment program as provided in 40CFR403.8(f)(3).
- 4. By March 1, of each year, the discharger shall submit an annual report to the Regional Board; the USEPA Region 9; the State Water Resources Control Board, Division of Water Quality, Regulations Unit; and the San Diego County Department of Health Services, Hazardous Materials Division, describing its pretreatment activities over the previous calendar year. In the event the discharger is not in compliance with any condition or requirement of this Order, or any pretreatment compliance inspection/audit requirements, the discharger shall include the reasons for noncompliance and state how and when it shall comply with such conditions and requirements. The annual report shall contain, but not be limited to, the following information:
 - a) A summary of analytical results from representative flow-proportioned 24 hour composite sampling of the discharger's influent and effluent for those pollutants known or suspected to be discharged by industrial users that the USEPA has identified under Section 307(a) of the CWA which are known or suspected to be discharged by industrial users. This will consist of an annual full priority pollutant scan. Wastewater sampling and analysis shall be performed in accordance with the minimum frequency of analysis stated in the Monitoring and Reporting Program of this Order. The discharger shall also provide influent and effluent monitoring data for nonpriority pollutants which the discharger believes may be causing or contributing to interference and/or pass through. The discharger is not required to sample and analyze for asbestos. Sludge sampling and analysis is addressed in the sludge section of this Order. Wastewater sampling and analysis shall be performed in accordance with 40 CFR Part 136.
 - b) A discussion of upset, interference, or pass through, if any, at the HARRF which the discharger knows or suspects were caused by industrial users. The discussion shall include the reasons why the incidents occurred, any corrective actions taken, and, if known, the name and address of the industrial user(s) responsible. The discussion shall also include a review of the applicable local pollutant limitations to determine whether any additional limitations or changes to existing limitations, are necessary to

- prevent pass through, interference, or noncompliance with sludge disposal requirements.
- c) An updated list of the dischargers significant industrial users including their names and addresses, and showing a list of additions, deletions, or name changes keyed to the previous submitted list. The list shall identify the industrial users subject to federal categorical standards by specifying which standards are applicable. The list shall also indicate which significant (non-categorical) industrial users are subject to local limitations.
- d) The discharger shall characterize the compliance status of each significant industrial user (SIU) by providing a list or table for the following:
 - 1) Name of SIU and category if subject to categorical standards;
 - 2) Type of wastewater treatment or control processes in place;
 - 3) Number of samples taken by SIU during the year;
 - 4) Number of samples and inspections by discharger during the year;
 - 5) For an SIU subject to discharge requirements for total toxic organics (TTO), whether all required certifications were provided;
 - 6) a list of pretreatment standards (categorical or local) violated during the year, or any other violations;
 - 7) Industries in significant noncompliance(SNC) as defined at 40 CFR Part 403.12(f)(2)(vii) at any time during the year;
 - 8) A summary of enforcement actions or any other actions taken against SIU(s) during the year. Describe the type of action, final compliance date, and the amount of fines and/or penalties collected, if any. Describe any proposed actions for bringing an SIU into compliance; and
 - 9) The name(s) of any SIU(s) required to submit a baseline monitoring report (BMR), and any SIU's currently discharging under a BMR.
- e) A brief description of any programs the discharger implements to reduce pollutants from industrial users not classified as SIU's;
- f) A brief description of any significant changes in operating the pretreatment program which differ from the previous year including, but not limited to, changes in the program's administrative structure, local limits, monitoring program, legal authority, enforcement policy, and funding and staffing levels;
- g) A summary of the annual pretreatment program budget, including the cost

of pretreatment program functions and equipment purchases;

- h) A summary of activities to involve and inform the public of the pretreatment program including a copy of the newspaper notice, if any, required under 40 CFR 403.8(f)(2)(vii);
- i) A description of any changes in sludge disposal methods; and
- j) A discussion of any concerns not described elsewhere in the annual report.
- The discharger shall submit a semiannual SIU compliance status report to the Regional Board, the State Water Resources Control Board, and the USEPA. The report shall cover the periods of January 1 through June 30, and July 1 through December 31 and shall be submitted no later than September 1st and March 1st, respectively. The report shall identify:
 - The names and addresses of all SIU's which violated any discharge or reporting requirements during the semi-annual reporting period;
 - b) A description of the violations including whether the discharge violations were for categorical standards or local limits;
 - c) A description of the enforcement actions, or other actions taken to remedy the noncompliance; and
 - d) The status of active enforcement actions, or other actions taken in response to SIU noncompliance identified in previous reports.
- 6. The discharger shall continue with its implementation of a Nonindustrial Source Control Program consisting of a public education program designed to minimize the entrance of nonindustrial toxic pollutants and pesticides into the sanitary sewer system. The Program shall be reviewed periodically and addressed in the annual report.

E. SLUDGE REQUIREMENTS

- 1. Management of all solids and sludge must comply with all requirements of CFR Parts 257, 258, 501, and 503, including all monitoring, record-keeping, and reporting requirements. Since the State of California, hence the Regional and State Boards, has not been delegated the authority by the USEPA to implement the sludge program, enforcement of sludge requirements of CFR Part 503 is under USEPA's jurisdiction.
- 2. All solids and sludge must be disposed of in a municipal solid waste landfill, reused by land application, or disposed of in a sludge-only landfill in accordance with 40 CFR Parts 503 and 258, and Title 23 CCR Chapter 15. If the discharger desires to dispose of solids or sludge by a different method, a request for permit modification must be submitted to the USEPA and this

Regional Board 180 days prior to the alternative disposal.

- 3. Sludge that is disposed of in a municipal solid waste landfill must meet the requirements of 40 CFR 25. In the annual self-monitoring report, the discharger shall include the amount of sludge disposed of, and the landfill(s) to which it was sent.
- 4. All the requirements of 40 CFR 503 and 23 CCR 15 are enforceable by the USEPA and this Regional Board whether or not the requirements are stated in an NPDES permit or any other permit issued to the discharger.
- 5. The discharger shall take all reasonable steps to prevent and minimize any sludge use or disposal in violation of this Order that has a likelihood of adversely affecting human health or the environment.
- 6. Solids and sludge treatment, storage, and disposal or reuse shall not create a nuisance, such as objectionable odors or flies, and shall not result in groundwater contamination.
- 7. The solids and sludge treatment and storage site shall have facilities adequate to divert surface water runoff from adjacent areas, to protect the boundaries of the site from erosion, and to prevent drainage from the treatment and storage site. Adequate protection is defined as protection from at least a 100-year storm and protection from the highest possible tidal stage that may occur.
- 8. The discharge of sewage sludge and solids shall not cause waste material to be in a position where it is, or can be, conveyed from the treatment and storage sites and deposited in the waters of the state.
- 9. The discharger shall submit an annual report to the USEPA and this Regional Board containing monitoring results and pathogen and vector attraction reduction requirements, as specified by 40 CFR 503. The discharger shall also report the quantity of sludge disposed and the disposal method. This self-monitoring report must be postmarked by February 19 of each year and report for the period covering the previous calendar year.

F. PROVISIONS

- 1. The discharger must comply with all standard provisions, where applicable, as stated in 40 CFR 122.41 (Attachment 3) and Attachment 4.
- 2. The following sections of 40 CFR (Attachment 5) are incorporated into this permit by reference, and the discharger must comply with these provisions:
 - a)122.5 Effect of a permit
 - b)122.21 Application for a permit
 - c)122.22 Signatories to permit applications and reports

| d)122.61 | Transfer of permits |
|----------|---------------------------------------|
| e)122.62 | Modification or revocation of permits |
| f)122.63 | Minor modifications of permits |
| g)122.64 | Termination of permits |

- 3. This Order may be modified, revoked and reissued, or terminated for causes including, but not limited to, the following:
 - a. Violation of any terms or conditions of this Order.
 - b. Obtaining this Order by misrepresentation or failure to disclose fully all relevant facts.
 - c. A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge.
- 4. If any applicable toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is promulgated under Section 307(a) of the CWA for a toxic pollutant and that standard or prohibition is more stringent than any limitation on the pollutant in this Order, the Executive Officer may institute proceedings under these regulations to modify or revoke and reissue the Order to conform to the toxic effluent standard or prohibition.
- 5. The discharger shall comply with effluent standards or prohibitions established under Section 307(a) of the CWA for toxic pollutants and with standards for sewage sludge use and disposal established under Section 405(d) of the CWA within the time provided in the regulations that establish these standards or prohibitions or standards for sewage sludge use or disposal, even if this Order has not yet been modified to incorporate the requirement.
- 6. The discharger shall comply with all existing federal and state laws and regulations that apply to its sewage sludge use and disposal practice(s), and with the CWA Section 405(d) and 40 CFR Part 257.
- 7. This Order does not convey any property rights of any sort or any exclusive privilege. The requirements prescribed herein do not authorize the commission of any act causing injury to persons or property, nor protect the discharger from its liabilities under federal, state, or local laws, nor create a vested right for the discharger to continue its waste discharge.
- 8. It shall not be a defense for the discharger in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this Order. Upon reduction, loss, or failure of a treatment facility, the discharger shall, to the extent necessary to maintain compliance with this Order, control production or all discharges,

or both, until the facility is restored or an alternative method of treatment is provided. This provision applies, for example, when the primary source of power of a treatment facility fails, is reduced, or is lost.

- 9. Supervisors and operators of the discharger's wastewater treatment facilities shall possess a certificate of appropriate grade in accordance with Chapter 14 of Division 4 of Title 23 of the California Code of Regulations.
- 10. The discharger's wastewater treatment facilities shall be operated and maintained in accordance with the operation and maintenance manual prepared by the discharger through the Clean Water Grant Program.
- 11. A copy of this Order shall be posted at a prominent location at or near the treatment and disposal facilities, and shall be available to operating personnel at all times.
- 12. The discharger shall comply with any interim effluent limitations as established by addendum, enforcement action or revised waste discharge requirements that have been or may be adopted by this Regional Board.
- 13. All proposed new treatment facilities and expansions of existing treatment facilities shall be completely constructed and operable prior to initiation of the discharge from the new or expanded facilities. The discharger shall submit a certification report for each new treatment facility, expansion of an existing treatment facility, and re-rating of an existing treatment facility. For new treatment facilities and expansions, the certification report shall be prepared by the design engineer. For re-ratings, the certification report shall be prepared by the engineer who evaluated the treatment facility capacity. The certification report shall:
 - a. Identify the design capacity of the treatment facility;
 - b. Certify the adequacy of each component of the treatment facility; and
 - c. Contain a requirement-by-requirement analysis, based on acceptable engineering practices, of how the process and physical design of the facility will ensure compliance with this Order.

The signature and engineering license number of the engineer preparing the certification report shall be affixed to the report. The certification report, should, if possible, be submitted prior to beginning construction. The discharger shall not initiate a discharge from a new treatment facility or initiate a discharge from an existing treatment facility at a 30-day average dry weather flowrate in excess of its previously approved design capacity until:

- a. The certification report is received by the Executive Officer;
- b. The Executive Officer has received written notification of the completion of construction (new treatment facilities and expansions

only);

- c. An inspection of the plant has been made by the Regional Board staff (new treatment facilities and expansions only); and
- d. The Executive Officer has provided the discharger with written authorization to discharge at a 30-day average dry weather flowrate not to exceed the revised design capacity.
- 14. If only one sample is collected during the time period associated with the effluent limitations (e.g., 30-day average or 6-month median), the single measurement shall be used to determine compliance with the effluent limitation for the entire time period.
- 15. All analytical data shall be reported uncensored with detection limits and quantitation limits identified. For any effluent limitation, compliance shall be determined using appropriate statistical methods to evaluate multiple samples. Sufficient sampling and analysis shall be conducted to determine compliance.
- 16. Compliance based on a single sample analysis should be determined where appropriate as described below.
 - a. When a calculated effluent limitation is greater than or equal to the PQL (defined below), compliance shall be determined based on the calculated effluent limitation and either single or multiple sample analyses.
 - b. When the calculated effluent limitation is below the PQL, compliance determinations based on analysis of a single sample shall only be undertaken if the concentration of the constituent of concern in the sample is greater than or equal to the PQL.
 - c. When the calculated effluent limitation is below the PQL and recurrent analytical responses between the PQL and the calculated limit occur, compliance shall be determined by statistical analysis of multiple samples.
- 17. Published values for MDLs (defined below) and PQLs should be used except where revised MDLs and PQLs are available from recent laboratory performance evaluations, in which case the revised MDLs and PQLs should be used. Where published values are not available, the Executive Officer will determine appropriate values based on available information, including information submitted by the discharger upon request of the Executive Officer.
 - a. The Method Detection Limit (MDL) is the minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero, as defined in 40

CFR Part 136 Appendix B.

- b. The Practical Quantitation Level (PQL) is the lowest concentration of a substance which can be consistently determined within +/-20% of the true concentration by 75% of the labs tested in a performance evaluation study. Alternatively, if performance data are not available, the PQL for carcinogens is the MDL x 5, and for noncarcinogens is the MDL x 10.
- 18. When determining compliance based on a single sample, with a single effluent limitation which applies to a group of chemicals (e.g. PCBs) concentrations of individual members of the group may be considered to be zero if the analytical response for individual chemicals falls below the MDL for that parameter.
- 19. The 6-month median effluent concentration limitation shall apply as a moving median of daily values for any 180-day period in which daily values represent flow-weighted average concentrations within a 24-hour period. For intermittent discharges, the daily value shall be considered to equal zero for days on which no discharge occurred. The 6-month median receiving water limitation shall apply as a moving median of daily values for any 180-day period.
- 20. The 30-day average effluent limitation shall be the moving arithmetic mean of daily concentrations over the specified 30-day period.
- 21. The 7-day average shall be the moving arithmetic mean of daily concentrations over the specified 7-day period.
- 22. The daily maximum effluent concentration limitation shall apply to flow weighted 24-hour composite samples. The daily maximum receiving water limitation shall apply to grab sample determinations.
- 23. The instantaneous maximum effluent concentration limitation shall apply to grab sample determinations. The instantaneous maximum receiving water limitation shall apply to grab sample determinations.
- 24. The mass emission rate (MER), in pounds per day, shall be obtained from the following calculation for any calendar day:

mass emission rate (lb/Day) = $8.34 \times Q \times C$

in which Q and C are the flow rate in MGallons/Day and the constituent concentration in mg/L, respectively, and 8.34 is a conversion factor. If a composite sample is taken, then C is the concentration measured in the composite sample and Q is the average flow rate occurring during the period over which the samples are composited.

25. The geometric mean used for determining compliance with bacterial

standards is calculated with the following equation:

Geometric Mean =
$$(C_1 \times C_2 \times ... \times C_n)^{1/n}$$

where n is the number of days samples were collected during the period and C is the concentration of bacteria (MPN/100 mL) found on each day of sampling.

26. Compliance with the Acute Toxicity limitation in Discharge Specification B.1.a. of this Order shall be determined using an established protocol, e.g., American Society for Testing Materials (ASTM), USEPA, American Public Health Association, or State Board. Acute Toxicity (TUa) shall be expressed in Toxic Units Acute (TUa), where:

TUa =
$$100$$

96-hour LC₅₀

Where LC_{50} is the Lethal Concentration 50% and the percent waste giving 50% survival of test organisms. LC_{50} shall be determined by static or continuous flow bioassay techniques using standard test species. If specific identifiable substances in wastewater can be demonstrated by the discharger as being rapidly rendered harmless upon discharge to the marine environment, but not as a result of dilution, the LC_{50} may be determined after the test samples are adjusted to remove the influence of those substances.

When it is not possible to measure the 96-hour LC_{50} due to greater than 50% survival of the test species in 100% waste, the toxicity concentration shall be calculated by the following:

TUa =
$$\frac{\log (100 - S)}{1.7}$$

where S is the percentage survival in 100% waste. If S > 99, TUa shall be reported as zero.

27. Compliance with the Chronic Toxicity effluent limitation established in Discharge Specification No. B.1.b of this Order shall be determined using critical life stage toxicity tests. Chronic Toxicity (TUc) shall be expressed as Toxic Units Chronic (TUc), where:

where NOEL is the No Observed Effect Level and is expressed as the maximum percent of effluent that causes no observable effect on a test organism, as determined by the result of a critical life stage toxicity test listed below.

A minimum of three test species with approved test protocols shall be used to

measure compliance with the chronic toxicity objective. If possible, the test species shall include a fish, an invertebrate, and an aquatic plant. After a screening period, monitoring may be reduced to the most sensitive species. Dilution and control water should be obtained from an unaffected area of the receiving waters. The sensitivity of the test organisms to a reference toxicant shall be determined concurrently with each bioassay test and reported with the test results.

The tests specified in the July 1997 Ocean Plan shall be used to measure TUc. Other tests may be added to the list when approved by the SWRCB.

- 28. If toxicity testing results show a violation of any acute or chronic toxicity limitation identified in Discharge Specification B.1 of this Order, the discharger shall:
 - a. Take all reasonable measures necessary to immediately minimize toxicity; and
 - b. Increase the frequency of the toxicity test(s) that showed a violation to at least two times per month until the results of at least two consecutive toxicity tests do not show violations.

If the Executive Officer determines that toxicity testing shows consistent violation of any acute or chronic toxicity limitation identified in Discharge Specification B.1. of this Order, the discharger shall conduct a TRE that includes all reasonable steps to identify the source of toxicity. Once the source of toxicity is identified, the discharger shall take all reasonable steps to reduce the toxicity to meet the toxicity limitations identified in Discharge Specification B.1 of this Order.

Within fourteen days of completion of the TRE, the discharger shall submit the results of the TRE, including a summary of the findings, data generated, a list of corrective actions necessary to achieve consistent compliance with all the toxicity limitations of this Order and prevent recurrence of violations of those limitations, and a time schedule for implementation of such corrective actions. The corrective actions and time schedule shall be modified at the direction of the Executive Officer.

29. For all bacterial analyses, sample dilutions should be performed so the range of values extends from 2 to 16,000 MPN (most probable number). The detection methods used for each analysis shall be reported with the results of the analysis. Detection methods used for coliforms (total and fecal) shall be those presented in the most recent edition of <u>Standard Methods for the Examination of Water and Wastewater</u> or any improved method determined by the Regional Board (and approved by USEPA) to be appropriate. Detection methods used for enterococcus shall be those presented in USEPA publication USEPA 600/4-85/076, <u>Test Methods for Escherichia coli and Enterococci in Water By Membrane Filter Procedure</u> or any improved method determined by the Regional Board to be appropriate.

- 30. As used in this Order, waste includes a discharger's total discharge, of whatever origin, i.e. gross, not net, discharge.
- 31. Reduction of natural light may be determined by the Regional Board by measurement of light transmissivity or total irradiance, or both, according to the monitoring needs of the Regional Board.
- 32. The discharger shall maintain a Sewer Overflow Prevention Plan (SOPP) for the Escondido Land Outfall (ELO) and the service area of the Hale Avenue Resource Recovery Facility (HARRF) in an up-to-date condition and shall amend the SOPP whenever there is a change (e.g. in the design, construction, operation, or maintenance of the sewerage system or sewerage facilities) which materially affects the potential for sewer overflows. The discharger shall review and amend the SOPP as appropriate after each sewer overflow from the ELO or in the service area of the HARRF. The SOPP and any amendments thereto, shall be subject to the approval of the Executive Officer and shall be modified as directed by the Executive Officer. The discharger shall submit the SOPP and any amendments thereto to the Executive Officer upon request of the Executive Officer. The discharger shall ensure that the up-to-date SOPP is readily available to sewerage system personnel at all times and that sewerage system personnel are familiar with it.
- 33. The discharger shall maintain a Sewer Overflow Response Plan (SORP) for the ELO in an up-to-date condition and shall amend the SORP as necessary. The discharger shall review and amend the SORP as appropriate after each sewer overflow from the ELO or in the service area of the HARRF. The SORP, and any amendments thereto, shall be subject to the approval of the Executive Officer and shall be modified as directed by the Executive Officer. The discharger shall submit the SORP and any amendments thereto to the Executive Officer upon request of the Executive Officer. The discharger shall ensure that the up-to-date SORP is readily available to sewerage system personnel at all times and that sewerage system personnel are familiar with it.
- 34. No later than 10 months after the adoption of this Order, the discharger shall submit a written report to the Executive Officer addressing the following:
 - a. Most current report on the SEOO capacity.
 - b. The discharger's best estimate of when the average daily dry-weather flow will equal or exceed the SEOO capacity.
 - c. The discharger's intended schedule for studies, design, and other steps needed to provide additional capacity for the SEOO and/or to control the flowrate before the flowrate is equal to the current outfall capacity.
 - d. The report must be signed, and agreed upon by each of the parties discharging through the SEOO.

35. No later than 90 days after the adoption of this Order, the discharger shall submit a written report to the Executive Officer in conformance with Reporting Requirement G.8 of this Order.

G. REPORTING REQUIREMENTS

- 1. The discharger must comply with standard monitoring and reporting requirements, where applicable, as stated in 40 CFR 122.41 (Attachment 3) and Attachment 4.
- 2. This Order expires November 10, 2004. If the discharger wishes to continue an activity regulated by this Order after the expiration date of this Order, the discharger must apply for and obtain new waste discharge requirements. The discharger must submit a full and complete Report of Waste Discharge in accordance with Title 23 of the California Code of Regulations, to the Executive Officer, not later than 180 days in advance of the expiration date of this Order, as application for issuance of new waste discharge requirements. Not less than 180 days prior to any material change in the character, location, volume, or amount of waste discharge, the Discharger shall submit a technical report describing changes including, but not limited to, the following:
 - a. Addition of a major industrial waste discharge to a discharge of essentially domestic sewage, or the addition of a new process or product by an industrial facility resulting in a change in the character of the waste.
 - b. Significant change in disposal method, e.g., change from land disposal to a direct discharge to water, or change in the method of treatment which would significantly alter the characteristics of the waste.
 - c. Significant change in the disposal area, e.g., moving the discharge to another drainage area, to a different water body, or to a disposal area significantly removed from the original area potentially causing different water quality or nuisance problems.
 - d. Increase in flow beyond that specified in the waste discharge requirements.
 - e. Increase in area or depth to be used for solid waste disposal beyond that specified in the waste discharge requirements. [CWC 13372, 13376, 13264, 23 CCR 2210]
 - f. Any substantial change in the amount or characteristics of pollutants used, handled, stored, or generated.
 - g. Any new discharge of pollutants or new potential pollutant source.
 - b. Other circumstances which could result in a material change in the

character, amount, or location of discharges. [CWC 13372, 13264,23 CCR 2210]

- 3. Pursuant to State Board Order No. WQ 84-7, the discharger shall submit with its Report of Waste Discharge for reissuance of its NPDES permit, sufficient information to justify why any effluent proposed to be discharged to the ocean is not being reclaimed for beneficial use.
- 4. Whenever a receiving water sample is found to contain levels of bacteria which exceed bacterial water quality objectives specified in Receiving Water Limitation C.1.a.(1) of this Order, the discharger shall immediately notify the County of San Diego Department of Environmental Health Services and post signs prohibiting body contact with the water in all areas affected by the contamination.
- 5. The discharger shall report sewer overflow events in accordance with the following procedures:
 - a. All sewer overflow events that occur in the service area of the HARRF shall be reported to the Regional Board and the County of San Diego Department of Environmental Health Services. A sewer overflow event is a discharge of treated or untreated wastewater at a location not authorized by waste discharge requirements and/or NPDES permit which results from a pump station failure, sewer line break, obstruction, surcharge, or any other circumstance.
 - b. If a sewer overflow event results in a discharge to surface waters:
 - (1) The sewer overflow event shall be reported to the Regional Board and the County of San Diego Environmental Health Services by telephone within 24 hours of the time the discharger becomes aware of the sewer overflow event. The telephone report shall include only the information specified by Item Nos. 1 through 5, 8, 12 A, 12 B and 13 contained in the Sewer Overflow Report (SOR) form supplied by the Regional Board.
 - (2) A SOR form (completed in accordance with the instructions), as well as any additional pertinent information, shall be submitted to the Regional Board no later than five days following the starting date of the sewer overflow event.
 - c. If a sewer overflow event does not result in a discharge to surface waters:
 - (1) No telephone report is required.
 - (2) An SOR form (completed in accordance with the

instructions), as well as any additional pertinent information, shall be submitted to the Regional Board no later than five days following the starting date of the sewer overflow event.

- 6. The discharger shall provide adequate notice to the Executive Officer of the following:
 - a. Any new introduction of pollutants into the discharger's treatment works from an indirect discharger which would be subject to Section 301 or 306 of the CWA if it were directly discharging those pollutants;
 - Any substantial change in the volume or character of pollutants being introduced into the discharger's treatment works by a source introducing pollutants into the treatment works at the time of issuance of this Order; and
 - c. For purposes of this paragraph, adequate notice shall include information on:
 - (1) The quality and quantity of effluent introduced into the POTW, and
 - (2) Any anticipated impact of the change on the quantity or quality of effluent and/or sludge to be discharged from the POTW.
- 7. Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each schedule date.
- 8. The discharger shall submit a written report to the Executive Officer within 90 days after the average dry weather influent flowrate for any 30-day period equals or exceeds 75 percent of the design capacity of the waste treatment and/or disposal facilities. The discharger's senior administrative officer shall sign a letter which transmits that report and certifies that the policy-making body is adequately informed about it. The report shall include:
 - a. Average daily flow for the 30-day period, the date on which the instantaneous peak flow occurred, the rate of that peak flow, and the total flow for that day.
 - b. The discharger's best estimate of when the average daily dry-weather flowrate will equal or exceed the design capacity of the facilities.
 - c. The discharger's intended schedule for studies, design, and other steps needed to provide additional capacity for the waste treatment and/or disposal facilities, and/or control the flowrate before the waste flowrate exceeds the capacity of present units.

- 9. Except for data determined to be confidential under 40 CFR Part 2, all reports prepared in accordance with the terms of this Order shall be available for public inspection at the offices of the California Regional Water Quality Control Board, San Diego Region. As required by the CWA, Reports of Waste Discharge, this Order, and effluent data shall not be considered confidential.
- 10. The discharger shall submit reports and provide notifications to the Regional Board and other agencies as specified in this Order. These other agencies include USEPA, and the San Diego County Department of Health Services. Reports shall be submitted and notifications shall be made to:
 - a. Executive Officer
 California Regional Water Quality Control Board
 San Diego Region
 9771 Clairemont Mesa Boulevard, Suite A
 San Diego, California 92124-1324
 Phone (858) 467-2952
 Fax (858) 571-6972
 - b. Regional Administrator
 U.S. Environmental Protection Agency
 Region 9
 75 Hawthorne Street
 San Francisco, California 94105
 - c. Environmental Health Services Division Department of Health Services County of San Diego P.O. Box 85261 San Diego, California 92138-5261 Phone - (619) 338-2222 Fax - (619) 338-2174

H. NOTIFICATIONS

1. California Water Code Section 13263(g) states:

No discharge of waste into the waters of the state, whether or not such discharge is made pursuant to waste discharge requirements, shall create a vested right to continue such discharge. All discharges of waste into waters of the state are privileges, not rights.

- 2. The discharger is held accountable for responsibilities, liabilities, legal actions, and penalties as stated in Attachment 4 and Attachment 5 of this Order.
- 3. This Order shall become effective 10 days after the date of its adoption provided the Regional Administrator, USEPA, has no objection. If the Regional Administrator objects to its issuance, this Order shall not become effective until such objection is withdrawn.
- 4. This Order supersedes Order No. 94-104 when this Order becomes effective.

ORDER NO. 99-72 ENDNOTES

$$log Co = -0.43 (log x) + 1.8$$

Ce = Co + Dm (Co - Cs)

where:

Co = the concentration (in ug/L) to be met at the completion of initial dilution

x = the duration of uninterrupted chlorine discharge in minutes

Ce = the effluent concentration limitation ug/L to apply when chlorine is

being intermittently discharged

Dm = the minimum probable initial dilution

Cs = the background seawater concentration = 0

¹ Conditions to be met for the discharge of 17.5 MGallons/Day are specified in Addendum No. 2 of Order 88-04.

² Secondary treatment is defined by the USEPA Administrator in the federal regulations (40 CFR Part 133.100 to 40 CFR Part 133.105) in terms of three parameters: 5-day biochemical oxygen demand (BOD₅), total suspended solids (TSS), and pH. Federal regulations allow substitution of 5-day carbonaceous biochemical oxygen demand (CBOD₅) limitations for BOD₅ limitations.

³ Effluent concentration limitations are specified in the 1997 Ocean Plan, Table A. Mass emission limitations, where applicable, were determined using procedures outlined in the Ocean Plan, Equation 2, and a flow rate of 16.5 MGallons/Day.

⁴ Effluent concentration and mass emission rate limitations were determined using the procedures outlined in the 1997 Ocean Plan, an initial dilution of 220, and a flow rate of 16.5 MGallons/Day.

⁵ The discharger may, at its option, meet this limitation as a total chromium limitation.

⁶ If the discharger can demonstrate to the satisfaction of the Regional Board (subject to EPA approval) that an analytical method is available to reliably distinguish between strongly and weakly complexed cyanide, effluent limitations for cyanide may be met by the combined measurement of free cyanide, simple alkali metal cyanides, and weakly complexed organometallic cyanide complexes. In order for the analytical method to be acceptable, the recovery of free cyanide from metal complexes must be comparable to that achieved by Standard Methods 412 F, G, and H (Standard Methods for the Examination of Water and Wastewater, Joint Editorial Board, American Public Health Association, American Water Works Association, and Water Pollution Control Federation, most recent edition.)

⁷ The effluent concentration and mass emission rate limitations for total chlorine residual are based on a continuous discharge of chlorine. Effluent concentration limitations for total chlorine residual, which are applicable to intermittent discharges not exceeding 2 hours, shall be determined through the use of the following equations:

 $^{^{8}}$ Endosulfan shall mean the sum of endosulfan-alpha and -beta and endosulfan sulfate.

⁹ <u>HCH</u> shall mean the sum of the alpha, beta, gamma (lindane) and delta isomers of hexachlorocyclohexane.

¹⁰ The 1997 Ocean Plan refers to limits specified in Title 17, Division 5, Chapter 4, Group 3, Article 3, Section 32069 of the California Code of Regulations. This section has been repealed, and substituted with limitations set forth in this Order.

¹⁸ <u>TCDD EQUIVALENTS</u> shall mean the sum of the concentrations of chlorinated dibenzodioxins (2,3,7,8-CDDs) and chlorinated dibenzofurans (2,3,7,8-CDFs) multiplied by their respective toxicity factors, as shown in the table below.

| Isomer Group | | Toxicity Equivalence Factor |
|---------------------|---|-----------------------------|
| 2,3,7,8-tetra CDD | , I | 1.0 |
| 2,3,7,8-penta CDD | | 0.5 |
| 2,3,7,8-hexa CDDs | * | 0.1 |
| 2,3,7,8-hepta CDD | | 0.01 |
| octa CDD | , | 0.001 |
| 2,3,7,8 tetra CDF | \$ - x | 0.1 |
| 1,2,3,7,8 penta CDF | * · · · · · · · · · · · · · · · · · · · | 0.05 |
| 2,3,4,7,8 penta CDF | , | 0.5 |
| 2,3,7,8 hexa CDFs | • | 0.1 |
| 2,3,7,8 hepta CDFs | | 0.01 |
| octa CDF | | 0.001 |
| | | |

¹⁹ 1997 Ocean Plan, Table B, Water Quality Objectives

¹¹ <u>Dichlorobenzenes</u> shall mean the sum of 1,2- and 1,3-dichlorobenzene.

¹² <u>Chlordane</u> shall mean the sum of chlordane-alpha, chlordane-gamma, chlordene-alpha, chlordene-gamma, nonachlor-alpha, nonachlor-gamma, and oxychlordane.

¹³ DDT shall mean the sum of 4,4'DDT, 2,4'DDT, 4,4'DDE, 2,4'DDE, 4,4'DDD, and 2,4'DDD.

¹⁴ <u>Halomethanes</u> shall mean the sum of bromoform, bromomethane (methyl bromide), chloromethane (methyl chloride), chlorodibromomethane, and dichlorobromomethane.

¹⁵ <u>Heptachlor</u> shall mean the sum of heptachlor and heptachlor epoxide.

¹⁶ PAHs(polynuclear aromatic hydrocarbons) shall mean the sum of acenaphthylene, anthracene, 1,2-benzanthracene, 3,4-benzofluoranthene, benzo[k]fluoranthene, 1,12-benzoperylene, benzo[a]pyrene, chrysene, dibenzo[ah]anthracene, fluorene, indeno[1,2,3-cd]pyrene, phenanthrene and pyrene.

¹⁷ <u>PCBs</u>(polychlorinated biphenyls) shall mean the sum of chlorinated biphenyls whose analytical characteristics resemble those of Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254 and Aroclor-1260.

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD SAN DIEGO REGION

ORDER NO. 99-72 NPDES PERMIT NO. CA0107981 MONITORING AND REPORTING PROGRAM FOR THE CITY OF ESCONDIDO HALE AVENUE RESOURCE RECOVERY FACILITY

DISCHARGE TO THE PACIFIC OCEAN VIA THE ESCONDIDO LAND OUTFALL AND THE SAN ELLJO OCEAN OUTFALL

This Monitoring and Reporting Program Supersedes Technical Change Order No. 1 to Order 94-104 in its entirety. This Monitoring and Reporting program shall become effective with the adoption of Order No. 99-72.

I. Purpose

This monitoring program is intended to:

- Document short-term and long-term effects of the discharge on receiving waters, sediments, biota, and beneficial uses of the receiving water.
- Determine compliance with NPDES permit terms and conditions.
- Assess the effectiveness of industrial pretreatment and toxic control programs.

The monitoring data will be used to determine compliance with water quality standards.

II. Monitoring Provisions

- 1. Samples and measurements taken as required herein shall be representative of the volume and nature¹ of the monitored discharge. All samples shall be taken at the monitoring points specified in this monitoring program and, unless otherwise specified, before the effluent joins or is diluted by any other waste stream, body of water, or substance. Monitoring points shall not be changed without notification to and the approval of the Executive Officer. Samples shall be collected at times representative of "worse case" conditions with respect to compliance with the requirements of Order No. 99-72.
- 2. Appropriate flow measurement devices and methods consistent with accepted scientific practices shall be selected and used to ensure the accuracy and reliability of measurements of the volume of monitored discharges. The devices shall be installed, calibrated, and maintained to ensure that the accuracy of the measurements are consistent with the accepted capability of that type of device.

Devices selected shall be capable of measuring flows with a maximum deviation of less than $\pm 10\%$ from true discharge rates throughout the range of expected discharge volumes.

- 3. Monitoring must be conducted according to United States Environmental Protection Agency (USEPA) test procedures approved under Title 40 of the Code of Federal Regulations Part 136 (40 CFR 136), <u>Guidelines Establishing Test Procedures for the Analysis of Pollutants</u>, as amended, unless otherwise specified for sludge in 40 CFR 503, or unless other test procedures have been specified in Order No. 99-72 and/ or in this monitoring and reporting program.
- 4. If the discharger monitors any pollutants more frequently than required by Order No. 99-72 or by this monitoring and reporting program, using test procedures approved under 40 CFR Part 136, or as specified in Order No. 99-72 and this monitoring and reporting program, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the discharger's monitoring report. The increased frequency of monitoring shall also be reported.
- 5. The discharger shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by Order No. 99-72 and this monitoring and reporting program, and records of all data used to complete the application for Order No. 99-72. Records shall be maintained for a minimum of 5 years from the date of the sample, measurement, report, or application. This period may be extended during the course of any unresolved litigation regarding this discharge or when requested by the Regional Board Executive Officer or the USEPA.
- 6. Records of monitoring information shall include:
 - a. The date, exact location, and time of sampling or measurements;
 - b. The name(s) of individual(s) who performed the sampling or measurements;
 - c. The date(s) analyses were performed;
 - d. The name(s) of the laboratory and individual(s) who performed the analyses;
 - e. The analytical techniques or methods used: and
 - f. The results of such analyses.
- 7. Calculations for all limitations that receive averaging of measurements shall utilize an arithmetic mean unless otherwise specified in Order 99-72 or this monitoring and reporting program.
- 8. All monitoring instruments and devices used by the discharger to fulfill the prescribed monitoring program shall be properly maintained and calibrated as necessary to ensure their continued accuracy. All flow measurement devices shall be calibrated at least once per year, or more frequently, to ensure continued accuracy of the devices.

- 9. All analyses shall be performed in a laboratory certified to perform such analyses by the California Department of Health Services or a laboratory approved by the Regional Board Executive Officer.
- 10. The discharger shall have, and implement, an acceptable written quality assurance (QA) plan for laboratory analyses. An annual report shall be submitted by February 1st of each year that summarizes the QA activities for the previous year. Duplicate chemical analyses must be conducted on a minimum of ten percent of the samples, or at least one sample per month, whichever is more frequent. A similar frequency shall be maintained for analyzing spiked samples. When requested by the USEPA or the Regional Board, the discharger will participate in the NPDES discharge monitoring report QA performance study. The discharger shall have a success rate equal to or greater than 80 percent.
- 11. The discharger shall report all instances of noncompliance not reported under Reporting Requirement G.5 of Order No. 99-72 at the time monitoring reports are submitted. The reports shall contain the information listed in Reporting Requirement G.5 of Order No. 99-72.
- 12. By February 1st of each year, the discharger shall submit an annual report to the Regional Board and USEPA Region 9 that contains tabular and graphical summaries of the monitoring data obtained during the previous year. The discharger shall discuss the compliance record and corrective actions taken, or which may be needed to bring the discharge into full compliance with the requirements of Order No. 99-72 and this monitoring and reporting program.
- 13. Laboratory method detection limits (MDLs) and practical quantitation levels (PQLs) shall be identified for each constituent in the matrix being analyzed with all reported analytical data. Acceptance of data shall be based on demonstrated laboratory performance.
- 14. Monitoring results shall be reported at intervals and in a manner specified in Order No. 99-72 and in this monitoring and reporting program. Unless otherwise specified, monitoring reports shall be submitted to the Regional Board and to USEPA Region 9 according to the following schedule:

| Monitoring Frequency Continuous, Daily, Weekly, or Monthly | Reporting Period All | Report Due By the first day of the second month after the month of sampling. |
|--|--|--|
| Quarterly | JanMarch April-June July-September October-December | May 1 August 1 November 1 February 1 |
| Semiannually | January-June July-December | August 1 February 1 |
| Annually | January-December | February 1 |

Once every 5 years

February 1

III. Influent Monitoring

Influent monitoring is intended to:

- Determine compliance with NPDES permit conditions and water quality standards.
- Assess treatment plant performance.
- Assess the effectiveness of an Industrial Pretreatment Program and a Toxic Control Program.

Sampling stations shall be established at each point of inflow to all treatment plants and shall be located upstream of any in-plant return flows, and where representative samples of the influent can be obtained. Influent samples shall be collected on the same day as, and shortly before the collection of effluent samples.

During periods when no effluent from a particular treatment plant is discharged to the Pacific Ocean, no influent monitoring, except for flowrate monitoring, is required at that treatment plant.

The following shall constitute the influent monitoring program:

| <u>Parameter</u> | <u>Unit</u> | Type of Sample ¹ | Minimum Frequency |
|--------------------------|--------------|-----------------------------|-------------------|
| Flowrate | MGallons/Day | recorder/ totalizer | continuous |
| CBOD ₅ @ 20°C | mg/L | 24-hour composite | weekly |
| Suspended Solids | mg/L | 24-hour composite | weekly |

IV. Effluent Monitoring

Effluent monitoring is intended to:

- Determine compliance with NPDES permit conditions and water quality standards.
- Identify operational problems in order to improve plant performance.
- Provide information on waste characteristics and flows for use in interpreting water quality and biological data.

The effluent sampling station shall be located downstream of any in-plant return flows, and disinfection units, where representative samples of the effluent discharged through the ocean outfall can be obtained.

During periods where no effluent from a particular treatment plant is discharged to the Pacific Ocean, no effluent monitoring, except for flowrate monitoring, is required at that treatment plant.

The following shall constitute the effluent monitoring program:

| <u>Parameter</u> | <u>Unit</u> | Type of Sample ¹ | Minimum Frequency |
|---------------------------|--------------|-------------------------------------|----------------------------|
| Flowrate | MGallons/Day | recorder/totalizer | continuous |
| CBOD ₅ @ 20°C | mg/L | 24-hour composite | daily ² |
| BOD ₅ | mg/L | 24-hour composite | monthly. |
| Suspended Solids | mg/L | 24-hour composite | daily ² |
| рН | pH units | grab | daily ² |
| Oil and Grease | mg/L | grab | monthly ³ |
| Settleable Solids | mL/L | grab | daily ² |
| Turbidity | NTU | 24-hour composite | weekly ³ |
| Acute Toxicity | TUa | 24-hour composite | monthly |
| Dissolved Oxygen | mg/L | grab | weekly |
| Temperature | °F | | weekly |
| Arsenic | ug/L | 24-hour composite | quarterly ^{3,4} |
| Cadmium | ug/L | 24-hour composite | quarterly 3,4 |
| Chromium(hexavaler | | 24-hour composite | quarterly ^{3,4,5} |
| Copper | ug/L | 24-hour composite | quarterly 3,4 |
| Lead | ug/L | 24-hour composite | quarterly 3,4 |
| Mercury | | 24-hour composite | quarterly 3,4 |
| Nickel | ug/L | 24-hour composite | quarterly 3,4 |
| Selenium | ug/L | • | quarterly 3,4 |
| Silver | ug/L | 24-hour composite 24-hour composite | quarterly 3,4 |
| Zinc | ug/L | 24-hour composite | |
| | ug/L | | qualterly. |
| Cyanide Total Basidual Cl | mg/L | 24-hour composite | quarterly 3,4 |
| Total Residual Cl | mg/L | grab | daily ⁶ |
| Ammonia (as N) | mg/L | 24-hour composite | monthly ³ |
| Chronic Toxicity | TUc | 24-hour composite | monthly ⁷ |
| Phenolic Compounds | s mg/L | 24-hour composite | quarterly 3,4 |
| (nonchlorinated) | | O4 have same asite | |
| Phenolic Compounds | s mg/L | 24-hour composite | quarterly 3,4 |
| (chlorinated) | /1 | O4 have approprie | |
| Endosulfan | ug/L | 24-hour composite | quarterly ^{3,4} |
| Endrin | ug/L | 24-hour composite | quarterly ^{3,4} |
| HCH | ug/L | 24-hour composite | quarterly 3,4 |
| Radioactivity | pCi/L | 24-hour composite | quarterly ³ |
| Acrolein | ug/L | grab | semiannually ³ |
| Antimony | ug/L | 24-hour composite | semiannually ³ |
| bis(2-chloroethoxy) | | | |
| methane | ug/L | grab | semiannually ³ |
| bis(2-chlorroisopropy | | | |
| ether | ug/L | grab | semiannually ³ |
| chlorobenzene | ug/L | grab | semiannually3 |
| chromium (III) | ug/L | 24-hour composite | semiannually ³ |
| di-n-butyl phthalate | ug/L | grab | semiannually ³ |
| dichlorobenzenes | ug/L | grab | semiannually |
| 1,1-dichloroethylene | ug/L | grab | semiannually3 |
| diethyl phthalate | ug/L | grab | semiannually ³ |
| dimethyl phthalate | ug/L | grab | semiannually ³ |
| 4,6-dinitro - 2- | | | • |
| methylphenol | ug/L | grab | semiannually ³ |
| 2,4 dinitrophenol | ug/L | grab | semiannually ³ |

| | | · · | |
|-----------------------|--------------|-----------------------------|-----------------------------|
| <u>Parameter</u> | <u>Unit</u> | Type of Sample ¹ | Minimum Frequency |
| ethylbenzene | ug/L | grab | semiannually ³ |
| fluoranthene | ug/L | grab | semiannually ³ |
| hexacyclopentadiene | ug/L | grab | semiannually ³ |
| isophorone | ug/L | grab | semiannually ³ |
| nitrobenzene | ug/L | grab | semiannually ³ |
| thallium | ug/L | 24-hour composite | semiannually ³ |
| toluene | ug/L | grab | semiannually ³ |
| 1,1,2,2-tetrachloro- | | | , njihi |
| ethane | ug/L | grab | semiannually ³ |
| tributyltin | ug/L | 24-hour composite | semiannually ³ |
| 1,1,1-trichloroethane | ug/L | grab | semiannually ³ |
| 1,1,2-trichloroehtane | ug/L | grab | semiannually ³ |
| acrylonitrile / | ug/L | grab | semiannually ³ |
| aldrin | ug/L | grab | semiannually ³ |
| benzene | ug/L | grab | semiannually ³ |
| benzidine | ug/L | grab | semiannually ³ |
| beryllium | ug/L | 24-hour composite | semiannually ³ |
| bis(2-chloroethyl) | · · | • | • |
| ether | ug/L | grab | semiannually ³ |
| bis(2-ehtylhexyl) | | | |
| phthalate | ug/L | grab | semiannually ³ |
| carbon tetrachloride | ug/L | grab | semiannually ³ |
| chlordane | ug/L | grab | semiannually ³ |
| chloroform | ug/L | grab | semiannually ³ |
| DDT | ug/L | grab | semiannually ³ |
| 1,4-dichlorobenzene | ug/L | grab | semiannually ³ |
| 3,3-dichlorobenzidine | | grab | semiannually ³ |
| 1,2-dichloroethane | ug/L | grab | semiannually ³ |
| | ug/L | grab | semiannually ³ |
| 1,3-dichloropropene | ug/L | grab | semiannually ³ |
| dieldrin | ug/L | grab | semiannually ³ |
| 2,4-dinitrotoluene | ug/L | grab | semiannually ³ |
| 1,2-diphenylhydrazine | | grab | semiannually ³ |
| halomethanes | ug/L | grab | semiannually ³ |
| heptachlor | ug/L | grab | semiannually ³ |
| hexachlorobenzene | ug/L | grab | semiannually ³ |
| hexachlorobutadiene | | grab | semiannually ³ |
| hexachloroethane | ug/L | grab | semiannually ³ |
| N-nitrosodimethyl- | 9. – | | |
| amine | ug/L | grab | semiannually ³ |
| N-nitrosodiphenyl- | 3 , | 9 | |
| amine | ug/L | grab | semiannually ³ |
| PAHs | ug/L | grab | semiannually ³ |
| PCBs | ng/L | grab | semiannually ³ |
| TCDD equivalents | pg/L | grab | semiannually ^{8,3} |
| Tetrachloroethylene | ug/L | grab | semiannually ³ |
| Toxaphene | ug/L | grab | semiannually ³ |
| Trichloroethylene | ug/L | grab | semiannually ³ |
| 2,4,6-trichlorophenol | ug/L | grab | semiannually ³ |
| vinyl chloride | ug/L | grab | semiannually ³ |
| virtyr ornoride | чу, L | grab | Johnannuany |

V. Solids Monitoring

Solids monitoring is intended to:

- · Assess the effectiveness of a pretreatment program.
- Maintain a record of the volume of solids generated and disposal sites used.
- Evaluate the character of sludge to ensure that appropriate disposal methods are employed.

A report identifying the volume of screenings, sludges, grit, and other solids removed from the wastewater and the point(s) at which these wastes were disposed of shall be submitted annually. A copy of all annual reports required by 40 CFR 503 shall be submitted to the Regional Board at the same time those reports are submitted to the USEPA.

VI. Receiving Water Monitoring

To determine compliance with water quality standards, the receiving water quality monitoring program must document conditions in the vicinity of the "Zone of Initial Dilution" (ZID) boundary, at reference stations, and at areas beyond the ZID where discharge impacts might reasonably be expected. Monitoring must reflect conditions during all critical environmental periods.

Receiving water and sediment monitoring in the vicinity of the San Elijo Ocean Outfall (SEOO) shall be conducted as specified below. Station location, sampling, sample preservation and analyses, when not specified, shall be by methods approved by the Executive Officer. The monitoring program may be modified by the Executive Officer at any time.

The receiving water and sediment monitoring program for the SEOO may be conducted jointly with other dischargers to the SEOO if the discharger so chooses. Receiving water and sediment monitoring stations shall be located and numbered as follows:

Monitoring Station Locations

| <u>Station</u> | Description |
|----------------|---|
| | Surf Zone Stations |
| S1 | Surf zone, 8,000' south of the outfall. |
| S2 | Surf zone, 4,500' south of the outfall. |
| S3 | Surf zone, 2,500' south of the outfall. |
| S4 | Surf zone, 500' south of the outfall. |
| S 5 | Surf zone, 500' north of the outfall. |
| S6 | Surf zone, 2,200' north of the outfall. |
| S7 | Surf zone, 4,000' north of the outfall. |
| | |
| | Nearshore Stations |
| N1 | Opposite S1, 3,000 feet seaward, MLLW. |
| N2 | Opposite S2, 3,000 feet seaward, MLLW. |

| N3 N4 N5 N6 N7 | Opposite S3, 3,000 feet seaward, MLLW. Opposite S4, 3,000 feet seaward, MLLW. Opposite S5, 3,000 feet seaward, MLLW. Opposite S6, 3,000 feet seaward, MLLW. Opposite S7, 3,000 feet seaward, MLLW. |
|----------------------------|--|
| | |
| | Offshore Stations |
| A14S | At the 120' depth contour, 14,000' south of the outfall. |
| A4S | At the 120' depth contour, 4,000' south of the outfall. |
| A2S | At the 120' depth contour, 2,000' south of the outfall. |
| A1S | At the 120' depth contour, 1,000' south of the outfall. |
| A0.5S | At the 120' depth contour, 500' south of the outfall. |
| A1N | At the 120' depth contour, 1,000' north of the outfall. |
| A2N | At the 120' depth contour, 2,000' north of the outfall. |
| | |
| | Biological Transects |
| T0.5S | At the 20, 40, 60, and 80 foot depth contours along the transect located |
| | 500 feet downcoast of and parallel to the outfall. |
| T4S | At the 20, 40, 60, and 80 foot depth contours along the transect located |
| | 4,000 feet downcoast of and parallel to the outfall. |
| T14S | At the 20, 40, 60, and 80 foot depth contours along the transect located |
| | 14,000 feet downcoast of and parallel to the outfall. |

It is recommended that stations be located using a land-based microwave positioning system, such as Mini-Ranger or trisponder, or a satellite positioning system such as Global Positioning System (GPS). The high levels of accuracy and precision afforded by this type of positioning system will ensure that stations are properly located with respect to the ZID. If an alternate navigation system (e.g. Loran C) is proposed, its accuracy should be compared to that of the systems recommended herein, and any compromises in accuracy should be justified.

Monitoring station locations may be modified with the approval of the Executive Officer.

A. SURF ZONE WATER QUALITY MONITORING

Surf zone monitoring is intended to assess bacteriological conditions in areas used for body-contact activities (e.g., swimming); and to assess aesthetic conditions for general recreational uses (e.g., picnicking).

All "surf zone stations" shall be monitored as follows:

- 1. Grab samples shall be collected and analyzed for total and fecal coliforms, and enterococcus at a minimum frequency of once per week from May 1 through October 31, and at a minimum frequency of once every other week from November 1, through April 30 of each year.
- 2. At the same time samples are collected from "surf zone stations" the following information shall be recorded: observation of wind (direction and speed), weather (e.g., cloudy, sunny, or rainy), current (e.g., direction), and tidal conditions; observations of water color, discoloration, oil and grease, turbidity, odor, and materials of sewage origin in the water or on

the beach; water temperature (°F); and status of San Elijo Lagoon mouth (e.g. open, closed, flow).

B. NEARSHORE WATER QUALITY MONITORING

Nearshore monitoring is intended to assess bacteriological conditions in areas used for body-contact activities (e.g. scuba diving) and where shellfish and/or kelp may be harvested; and to assess aesthetic conditions for general boating and recreational uses.

All "nearshore stations" shall be monitored as follows:

1. Reduced Monitoring

If the Executive Officer determines that the effluent at all times complies with Discharge Specifications B.1 and B.3 of Order No. 99-72, only the reduced nearshore water quality monitoring specified below is required.

| <u>Determination</u> | <u>Units</u> Ty | pe of Sample | Minimum Frequency |
|----------------------------|-----------------|-------------------|-------------------|
| Visual Observations | | | Monthly |
| Total and Fecal | | | |
| Coliforms, | #/100mL | Grab ⁹ | Monthly |
| Enterococcus ¹⁰ | #/100mL | Grab ⁹ | Monthly |

2. Intensive Monitoring

The intensive nearshore water quality monitoring specified below is required during the 12-month period beginning May 1, 2003 through April 30, 2004, and must be submitted by May 31, 2004. This monitoring data will assist Regional Board staff in the evaluation of the Report of Waste Discharge required by Reporting Requirement G.2 to be submitted by May 10, 2004, 180 days prior to the Order's expiration date of November 10, 2004. The intensive nearshore water quality monitoring specified below is also required if the Executive Officer determines that the effluent does not at all times comply with Discharge Specifications B.1 and B.3 of Order No. 99-72.

| <u>Determination</u> | <u>Units</u> | Type of Sample | Minimum Frequency |
|----------------------|--------------|-----------------------|-------------------|
| Visual Observations | | · | Monthly |
| Total and Fecal | | | |
| Coliforms, | #/100m | nL Grab ¹¹ | Monthly |
| Enterococcus | #/100m | nL Grab ¹¹ | Monthly |

C. OFFSHORE WATER QUALITY MONITORING

Offshore monitoring is intended to determine compliance with the Ocean Plan; and to determine if the applicant's discharge causes significant impacts on the water quality within the ZID and beyond the ZID as compared to reference areas.

All "offshore stations" shall be monitored as follows:

1. Reduced Monitoring

If the Executive Officer determines that the effluent at all times complies with Discharge Specifications B.1 and B.3 of Order No. 99-72, only the reduced offshore water quality monitoring specified below is required.

| <u>Determination</u> | Units Type | of Sample | Minimum Frequency |
|----------------------------|------------|--------------------|-------------------|
| Visual Observations | | | Monthly |
| Total and Fecal | | | - |
| Coliforms, | #/100mL | Grab ¹¹ | Monthly |
| Enterococcus ¹⁰ | #/100mL | Grab ¹¹ | Monthly |

2. Intensive Monitoring

The intensive water quality monitoring specified below is required during the 12-month period beginning May 1, 2003 through April 30, 2004, and must be submitted by May 31, 2004. This monitoring data will assist Regional Board staff in the evaluation of the Report of Waste Discharge required by Reporting Requirement G.2 to be submitted by May 10, 2004, 180 days prior to the Order's expiration date of November 10, 2004. The intensive offshore water quality monitoring specified below is also required if the Executive Officer determines that the effluent does not at all times comply with Discharge Specifications B.1 and B.3 of Order No. 99-72.

| <u>Determination</u> Visual Observations | Units Type | e of Sample | Minimum Frequency Monthly |
|---|------------|--------------------------|---------------------------|
| Total and Fecal Coliforms, | #/100mL | Grab ¹¹ | Monthly |
| Enterococcus | #/100mL | Grab ¹¹ | Monthly |
| Temperature | °F | Grab ¹² | Monthly |
| Dissolved Oxygen | mg/L | Grab ¹² | Monthly |
| Light Transmittance | % | Instrument ¹² | Monthly |
| рĤ | pH units | Grab ⁹ | Annually |

D. BENTHIC MONITORING

Benthic monitoring is intended to assess the status of the benthic community, and to evaluate the physical and chemical quality of the sediments.

The intensive monitoring specified below is required during the 12-month period beginning May 1, 2003 through April 30, 2004, and must be submitted by May 31, 2004. This monitoring data will assist Regional Board staff in the evaluation of the Report of Waste Discharge required by Reporting Requirement G.2 to be submitted by May 10, 2004, 180 days prior to the Order's expiration date of November 10, 2004. The sediment monitoring specified below is also required if the Executive Officer determines that the effluent does not at all times comply with Discharge Specifications B.1 and B.3 of Order No. 99-72. Sediment monitoring shall be conducted at all "offshore stations".

1. Sediment Characteristics

Analyses shall be performed on the upper two inches of core.

| <u>Determination</u> | <u>Units</u> | Type of Sample | Minimum Frequency |
|----------------------|--------------|----------------|-------------------|
| Sulfides | mg/kg | Core | Semiannually |

| Total Chlorinated | | | |
|-------------------------|--------|------|--------------|
| Hydrocarbons | mg/kg | Core | Semiannually |
| BOD₅ | mg/kg | Core | Semiannually |
| COD ₅ | mg/kg | Core | Semiannually |
| Particle Size Distribut | ion | Core | Semiannually |
| Arsenic | mg/kg | Core | Annually |
| Cadmium | mg/kg | Core | Annually |
| Total Chromium | mg/kg | Core | Annually |
| Copper | mg/kg | Core | Annually |
| Lead | mg/kg | Core | Annually |
| Mercury | mg/kg | Core | Annually |
| Nickel | mg/kg | Core | Annually |
| Silver | mg/kg | Core | Annually |
| Zinc | mg/kg | Core | Annually |
| Cyanide | mg/kg | Core | Annually |
| Phenolic Compounds | mg/kg | Core | Annually |
| Radioactivity | pCi/kg | Core | Annually |
| | | | |

2. Infauna

Samples are to be collected with a Paterson, Smith-McIntyre, or orange-peel-type dredge, having an open sampling area of not less than 124 square inches and a sediment capacity of not less than 210 cubic inches. The sediment shall be sifted through a one-millimeter mesh screen and all organisms shall be identified to as low a taxon as possible.

| Determination | <u>Units</u> | Minimum Frequency |
|----------------------|--------------------|-------------------|
| Benthic Biota | Identification and | 3 Grabs |
| • | Enumeration | Semiannually |

E. ADDITIONAL BIOLOGICAL MONITORING

1. Demersal Fish and Macroinvertebrates

The intensive monitoring specified below is required during the 12-month period beginning May 1, 2003 through April 30, 2004, and must be submitted by May 31, 2004. This monitoring data will assist Regional Board staff in the evaluation of the Report of Waste Discharge required by Reporting Requirement G.2 to be submitted by May 10, 2004, 180 days prior to the Order's expiration date of November 10, 2004. The biological transect monitoring specified below is also required if the Executive Officer determines that the effluent does not at all times comply with Discharge Specification B.1, and B.3 of Order No. 99-72.

| <u>Determination</u> | <u>Units</u> | <u>Type</u> | of Sample ¹³ | Minimum Frequency |
|----------------------|----------------|-------------|-------------------------|-------------------|
| Biological | Identification | and | *** | Annually |
| Transects | Enumeration | | | |

In rocky or cobble areas, a 30-meter band transect, one meter wide shall established on the ocean bottom. Operations at each underwater station shall include: (1) Water temperature (may be measured from a boat), estimated visibility and pelagic macrobiota at each 10-foot depth increment throughout the water column and at the bottom recorded; (2)

general bottom description recorded; (3) enumeration by estimate of the larger plants and animals in the band transect area recorded; (4) representative photographic record of sampled area taken; and (5) within each band, three one-quarter meter square areas shall be randomly selected and all macroscopic plant and animal life shall be identified to as low a taxon as possible and measured.

For both epifauna and infauna, size frequency and distribution shall be shown for at least the three numerically largest populations identified to the lowest possible taxon and appropriate graphs showing the relationship between species frequency and population shall be plotted from each sample.

2. Kelp Bed Monitoring

Kelp bed monitoring is intended to assess the extent to which the discharge of wastes may affect the areal extent and health of coastal kelp beds.

The discharger shall participate with other ocean dischargers in the San Diego Region in an annual regional kelp bed photographic survey. Kelp beds shall be monitored annually by means of vertical aerial infrared photography to determine the maximum areal extent of the region's coastal kelp beds within the calendar year. Surveys shall be conducted as close as possible to the time when kelp bed canopies cover the greatest area. The entire San Diego Region coastline, from the international boundary to the San Diego Region/ Santa Ana Region boundary, shall be photographed on the same day.

The images produced by the surveys shall be presented in the form of a 1:24,000 scale photo-mosaic of the entire San Diego Region coastline. Onshore reference points, locations of all ocean outfalls and diffusers, and the 30-foot (MLLW) and 60-foot (MLLW) depth contours shall be shown.

The areal extent of the various kelp beds photographed in each survey shall be compared to that noted in surveys of previous years. Any significant losses which persist for more than one year shall be investigated by divers to determine the probable reason for the loss.

I, John H. Robertus, Executive Officer of the San Diego Regional Water Quality Control Board, do hereby certify the foregoing is a full, true, and correct copy of Order No. 99-72 adopted by the California Regional Water Quality Control Board, San Diego Region, on November 10, 1999.

frigural right by JOHNH. ROBERTUS

Executive Officer

MONITORING AND REPORTING PROGRAM ENDNOTES

- 1 For samples collected from the various treatment plants which are to be physically composited prior to analysis or for the results of analyses which are to be arithmetically composited, the basis for compositing shall be the rate of discharge from the various plants to the ocean, not the rate of inflow to the various plants.
- 2 Five days per week except seven days per week for at least one week in July or August of each year.
- 3 The minimum frequency of monitoring for this constituent shall be automatically increased to twice the minimum frequency specified here if any analysis for this constituent yields a result higher than the effluent limit specified in Order No. 99-72 for this constituent. The increased minimum frequency of monitoring shall remain in effect until the results of a minimum of four consecutive analyses for this constituent are below all effluent limits specified in Order No. 99-72 for this constituent.
- 4 The minimum frequency of monitoring for this constituent is automatically reduced to annually if the results of twelve consecutive analyses, representing each month of the year, or the results of twenty-four consecutive analyses, representing each quarter of the year, are below the Ocean Plan 6-month median water quality objective for this constituent, or below the laboratory MDL for this constituent in the matrix being analyzed, whichever is higher.
- 5 The discharger may at its option monitor for total chromium. If the measured total chromium concentration exceeds the hexavalent chromium limitation, it will be assumed that the hexavalent chromium limitation was exceeded unless the results of a hexavalent chromium analysis of a replicate sample indicate otherwise. When analyzing for hexavalent chromium, the appropriate sampling and analytical method must be used (i.e., 24-hour composite cooled to 4° C and analyzed within 24 hours.
- 6 Monitoring of Total Chlorine Residual is not required on days when none of the treatment facilities that are subject to Order No. 99-72 use chlorine for disinfection. If only one sample is collected for total Chlorine residual analysis on a particular day, that samples must be collected at the time when the concentration of total chlorine residual in the discharge would be expected to be greatest. The times of chlorine discharges on the days the samples are collected, and the time at which samples are collected shall be reported.
- 7 A screening period for chronic toxicity shall be conducted every other year for three quarters, using a minimum of three test species (one plant, one invertebrate, and one vertebrate) chosen from the list of approved chronic toxicity test protocols specified in the 1997 Ocean Plan. After the screening period, the most sensitive species (i.e. the species exhibiting the lowest NOEL) shall be used for the quarterly testing. Repeat screening periods may be terminated after the first month if the most sensitive species is the same as the species previously found to be most sensitive.

Results for chronic toxicity shall be submitted, electronically, in the TOXIS version 2.4-database format. After one year, the data will be evaluated by regional board staff to determine if a reduction in the minimum monitoring

frequency is appropriate. If the Executive Officer determines that a reduction in the minimum monitoring frequency is appropriate, the minimum monitoring frequency will be specified by the Executive Officer.

8 EPA method 8280 shall be used to analyze for TCDD equivalents.

⁹ at the surface.

¹⁰ If the discharger demonstrates to the satisfaction of the Executive Officer, by means of daily analyses, that the concentrations of total and fecal coliform bacteria in the effluent are consistently less than 1,000 per 100 mL, enterococcus monitoring may be suspended. The discharger shall conduct the monitoring as specified unless the Executive Officer provides written authorization to suspend it. If this monitoring is suspended, the discharger shall resume it at the request of the Executive Officer.

¹¹ At surface and mid-depth.

¹² At surface, mid-depth, and bottom.

¹³ ***Sampling techniques will follow those employed by biologist divers of the California State Department of Fish and Game. In sandy areas, a 30 meter band transect, one meter wide, shall be established on the ocean bottom. Operations at each underwater station shall include: (1) Water temperature (may be measured from a boat), estimated visibility and pelagic macrobiota at each 10-foot depth increment throughout the water column and at the bottom recorded; (2) general bottom description recorded; (3) height, period, and crest direction of ripple marks recorded; (4) amount, description, and location of detritus on bottom recorded; (5) representative photographic record of sampled area taken; and (6) within each band, three cores of at least 42.5 cm² in area shall be randomly taken to a depth of 15 cm where possible, (the three cores may be taken from a boat) and the material removed sifted through at least a 1 millimeter mesh screen, and all organisms identified to as low a taxon as possible, enumerated, measured, and reproductive conditions assessed where feasible.

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD (RWQCB) SAN DIEGO REGION

STANDARD PROVISIONS

- A. <u>General Provisions</u> (Applicable To All Permits)
 - 1. Duty To Comply [40 CFR 122.41(a)][CWC 133.81]
 a. The discharger must comply with all of the conditions of this permit. Any permit noncompliance constitutes a violation of the Clean Water Act and the Porter-Cologne Water Quality Control Act and is grounds for enforcement action, for permit termination, revocation and reissuance or modification, or for denial of a permit renewal application.
 - b. The discharger shall comply with effluent standards or prohibitions established under Section 307(a) of the Clean Water Act for toxic pollutants and with standards for sewage sludge use or disposal established under Section 405(d) of the Clean Water Act within the time provided in the regulations that establish these standards or prohibitions, even if this permit has not been modified to incorporate the requirement.
 - 2. <u>Duty To Reapply</u> [40 CFR 122.41(b)][CWC 2235.4]
 - a. If the discharger wishes to continue an activity regulated by this permit after the expiration date of this permit, the discharger must apply for and obtain a new permit. The discharger shall submit a new application at least 180 days before the permit expires.
 - b. The terms and conditions of an expired permit are automatically continued pending issuance of a new permit if all requirements of the federal NPDES regulations on continuation of expired permits are complied with.

Duty To Mitigate [40 CFR 122.41(d)]

- a. The discharger shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.
- 4. Proper Operation and Maintenance [40 CFR 122:41(=)]
 - a. The discharger shall at all time properly operate

and maintain all facilities and systems of treatment and control (and related appurtenances) that are installed or used by the discharger to achieve compliance with this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems which are installed by a discharger only when necessary to achieve compliance with the conditions of this permit.

- 5. <u>Permit Actions</u> [40 CFR 122.41(f)][CWC 1326(e)][40 CFR 122.44(b)(1)]
 - a. This permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the discharger for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.
 - b. The RWQCB also review and revise this permit at any time upon application of any affected person, or on the Regional Board's own motion.
 - c. If any toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is promulgated under Section 307(a) of the Clean Water Act for a toxic pollutant which is present in the discharge, and that standard or prohibition is more stringent than any limitation on the pollutant in this permit, this permit shall be modified or revoked and reissued to conform to the toxic effluent standard or prohibition and the discharger so notified.
- 6. <u>Property Rights</u> [40 CFR 122.41(g)][CWC 13263(g)]
 - a. This permit does not convey any property rights of any sort, or any exclusive privileges.
 - b. All discharges of waste into waters of the state are privileges, not rights.
- 7. Duty To Provide Information [40 CFR 122.41(h)]
 - a. The discharger shall furnish the RWQCB, SWRCB, or EPA, within a reasonable time, any information which the RWQCB, SWRCB, or EPA may request to determine whether cause exists for modifying,

revoking and reissuing, or terminating this permit or to determine compliance with this permit. The discharger shall also furnish to the RWQCB, SWRCB, or EPA upon request, copies of records required to be kept by this permit.

$\sqrt{8}$. Inspection and Entry [40 CFR 122.41(1)]

- a. The discharger shall allow the Regional Board, State Board, EPA, and/or their authorized representatives (including an authorized contractor acting as their representative) upon the presentation of credentials and other documents as may be required by law, to:
 - (1) Enter upon the discharger's premises where a regulated facility or activity is located or conducted, or where records are kept under the conditions of this permit.
 - (2) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
 - (3) Inspect and photograph, at reasonable times, any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
 - (4) Sample or monitor, at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act or Porter-Cologne Water Quality Control Act, any substances or parameters at any location.

9. <u>Bypass</u> [40 CFR 122.41(m)] <

a. Definitions.

- (1) "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility.
- (2) "Severe property damage" means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.

b. The discharger may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. Such bypasses are not subject to paragraphs (c) and (d) of this provision.

c. Notice.

- (1) If the discharger knows in advance of the need for a bypass, it shall submit prior notice, if possible, at least 10 days before the date of the bypass.
- (2) The discharger shall submit notice of an unanticipated bypass as required in paragraph B.5 of the Monitoring and Reporting Requirements (24-hour notice).
- d. Bypass is prohibited, and the Regional Board may take enforcement action against the discharger for bypass, unless:
 - (1) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
 - (2) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and
 - (3) The discharger submitted notices as required under paragraph c. of this provision.
- e. The RWQCB may approve an anticipated bypass, after considering its adverse effects, if the RWQCB determines that it will meet the three conditions listed in paragraph (d) of this provision.

10. <u>Upset</u> [40 CFR 122.41(n)]

a. Definition. "Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the discharger. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

- b. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology-based permit effluent limitations if the requirements of paragraph (c) of this provision are met. No determination made before an action for noncompliance, such as during administrative review of claims that noncompliance was caused by upset, is final administrative action subject to judicial review.
- c. A discharger that wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:
 - (1) An upset occurred and that the discharger can identify the cause(s) of the upset;
 - (2) The permitted facility was at the time being properly operated;
 - (3) The discharger submitted notice of the upset as required in provision B.5 of the Monitoring and Reporting Requirements (24-hour notice); and
 - (4) The discharger complied with any remedial measures required under provision A.3 of the General Provisions.
- d. In any enforcement proceeding, the discharger seeking to establish the occurrence of an upset has the burden of proof.
- 11. <u>Transfers</u> [40 CFR 122.41(L)(3)][CWC 13377][40 CFR 122.61 (a)(b)]
 - a. This permit is not transferable to any person except after notice to the RWQCB. The RWQCB may require modification or revocation and reissuance of the permit to change the name of the discharger and incorporate such other requirements as may be necessary under the Clean Water Act and the Perter-Cologne Water Quality Control Act.

Standard Provisions

- b. Except as provided in paragraph (c) below, a permit may be transferred by the discharger to a new owner or operator only if the permit has been modified or revoked and reissued, or a minor modification made to identify the new discharger and incorporate such other requirements as may be necessary under the Clean Water Act.
- c. As an alternative to transfers under paragraph (b) above, any NPDES permit may be automatically transferred to a new discharger if:
 - (1) The current discharger notifies the Regional Board at least 30 days in advance of the proposed transfer date in paragraph (c) (2) below;
 - (2) The notice includes a written agreement between the existing and new dischargers containing a specific date for transfer of permit responsibility, coverage, and liability; and
 - discharger and the proposed new discharger of its intent to modify or revoke and reissue the permit. A modification under this subparagraph may also be a minor modification under 40 CFR Part 122.63. If this notice is not received, the transfer is effective on the date specified in the agreement mentioned in paragraph (c) (2) above.

12. Severability

a. The provisions of this order are severable, and if any provision of this order, or the application of any provisions of this order to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this order shall not be affected thereby.

13. Pollution, Contamination, Nuisance [CWC 13050]

a. Neither the treatment nor the discharge shall create a condition of pollution, contamination or nuisance.

- B. <u>Monitoring and Reporting Requirements</u> (Applicable To All Permits)
 - 1. Monitoring and Records [40 CFR 122.41(j)]
 - a. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.
 - Plant Supervision and Operation [Title 23, CCR, Div 3, Chap 14]
 - a. If the discharger's wastewater treatment plant is publicly owned or subject to regulation by the California Public Utilities Commission, it shall be supervised and operated by persons possessing certificates of appropriate grade.
 - Except for records of monitoring information b. required by this permit related to the discharger's sewage sludge use and disposal activities, which shall be retained for a period of at least five years (or longer as required by 40 CFR Part 503), discharger shall retain records of all monitoring information, including all calibration and maintenance records and all original strip recordings of continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least three years from the date of the sample, measurement, report, or application. period may be extended by request of the RWQCB, SWRCB, or EPA at any time.
 - c. Records of monitoring information shall include:
 - The date, exact place, and time of sampling or measurements;
 - (2) The individual(s) who performed the sampling or measurements;
 - (3) The date(s) analyses were performed;
 - (4) The individual(s) who performed the analysis;
 - (5) The analytical techniques or methods used; and
 - (6) The results of such analyses.

- d. Monitoring results must be conducted according to test procedures under 40 CFR Part 136 or, in the case of sludge use or disposal, approved under 40 CFR part 136 unless otherwise specified in 40 CFR Part 503; unless other test procedures have been specified in this permit.
- 3. <u>Signatory Requirements</u> [40 CFR 122.41(k)][40 CFR 122.22]
 - a. All permit applications submitted to the RWQCB, SWRCB, and/or EPA shall be signed as follows:
 - (1) For a corporation: by a responsible corporate officer. For the purpose of this provision, a responsible corporate officer means: president, secretary, treasure, or or vice president of the corporation in charge of a principal business function, or any other who performs similar policy person decision-making functions for the corporation, or the manager of one or more manufacturing, production, or operating facilities employing. more than 250 persons or having gross annual sales or expenditures exceeding \$25 million (in second-quarter 1980 dollars), if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.
 - (2) For a partnership or sole proprietorship: by a general partner or the proprietor, respectively; or
 - (3) For a municipality, State, Federal, or other public agency: by either a principal executive officer or ranking elected official. For purposes of this provision, a principal executive officer of a Federal agency includes: the chief executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrators of EPA).
 - b. All reports required by this permit and other information requested by the RWQCB, State Board, or EPA shall be signed by a person described in paragraph (a) of this provision, or by a duly authorized representative of that person. A person is a duly authorized representative only if:
 - (1) The authorization is made in writing by a person described in paragraph (a) of this

provision;

- (2) The authorization specified either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company (a duly authorized representative may thus be either a named individual or any individual occupying a named position) and,
- (3) The written authorization is submitted to the RWQCB, SWRCB or EPA.
- c. If an authorization under paragraph (b) of this provision is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of paragraph (b) of this provision must be submitted to the RWQCB, SWRCB or EPA prior to or together with any reports, information, or applications to be signed by an authorized representative.
- d. Any person signing a document under paragraph (a) or (b) of this provision shall make the following certification:
 - "I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted, is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."
- 4. <u>Monitoring Reports</u> [40 CFR 122.41(1)(4)]
 - a. Monitoring results shall be reported at the intervals specified in the permit.

- b. Monitoring results must be reported on a Discharge Monitoring Report (DMR) form or forms approved by the RWQCB for reporting results of monitoring of pollutants and sludge use or disposal practices.
- c. If the discharger monitors any pollutant more frequently than required by the permit, using test procedures approved under 40 CFR Part 136 or, in the case of sludge use or disposal, approved under 40 CFR Part 136 unless otherwise specified in Part 503, or as specified in this permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR or other approved form.
- d. Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified in this permit.

5. Compliance Schedules [40 CFR 122.41(1)(5)]

a. Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each schedule date.

6. Twenty-four Hour Reporting [40 CFR 122.41(1)(6)]

- a. The discharger shall report any noncompliance that may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the discharger becomes aware of the circumstances. A written submission shall also be provided within 5 days of the time the discharger becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.
- b. The following shall be included as information that must be reported within 24 hours under this paragraph:
 - (1) Any unanticipated bypass which exceeds any effluent limitation in the permit.

- (2) Any upset which exceeds any effluent limitation in the permit.
- (3) Violation of a maximum daily discharge limitation for any of the pollutants listed by the RWQCB in this permit is to be reported within 24 hours. The RWQCB may waive the above required written report on a case-by-case basis for reports under this provision if an oral report has been received within 24 hours.

7. Other Noncompliance [40 CFR 122.41(1)(7)]

a. The discharger shall report all instances of noncompliance not reported under Provisions (B.3), (B.4), and (B.5) at the time monitoring reports are submitted. The reports shall contain the information listed in Provision (B.5).

8. Other Information [40 CFR 122.41(1)(8)]

a. When the discharger becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the RWQCB, the discharger shall promptly submit such facts or information.

9. Planned Changes [40 CFR 122.41(1)(1)]

- a. The discharger shall give notice to the RWQCB as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required under this provision only when:
 - (1) The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in 40 CFR Part 122.29(b); or
 - (2) The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations in the permit, not to notification requirements under 40 CFR Part 122.42 (a)(1); or
 - (3) The alteration or addition results in a significant change in the discharger's sludge use or disposal practices, and such

alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan.

10. Anticipated Noncompliance [40 CFR 122.41(1)(2)]

a. The discharger shall give advance notice to the RWQCB of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

11. <u>Discharge Monitoring Quality Assurance (DMQA) Program</u> [SWRCB/EPA 10.6 MOA]

a. The discharger shall conduct appropriate analyses on any sample provided by EPA as part of the DMQA program. The results of such analyses shall be submitted to EPA's DMQA manager.

C. <u>Enforcement Provisions</u> (Applicable To All Permits)

- The Clean Water Act provides that any person who violates 1. a permit condition implementing Sections 301, 302, 306, 307, 308, 318 or 405 of the Clean Water Act is subject to a civil penalty not to exceed \$25,000 per day of violation. Any person who negligently violates permit conditions implementing Sections 301, 302, 306, 307, 308, 318, or 405 of the Act is subject to a fine of not less than \$2,500 nor more than \$25,000 per day for each violation, or by imprisonment of not more than 1 year, or Higher penalties may be imposed for knowing violations and for repeat offenders. The Porter-Cologne Water Quality Control Act provides for civil and criminal penalties comparable to, and in some cases greater than, those provided under the Clean Water Act. [40 CFR 122.41(a)(2)][CWC Sections 13385 and 13387]
- 2. The Clean Water Act provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit including monitoring reports or reports of compliance or noncompliance shall, upon conviction, be punished by a fine of not more than \$10,000 per violation, or by imprisonment for not more than 6 months per violation, or by both. [40 CFR 122.41(k)(2)]

3. The Clean Water Act provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than \$10,000, or by imprisonment for not more than 2 years, or both. Higher penalties may be imposed for repeat offenders. [40 CFR 122.41(j)(5)]

D. Additional Conditions Applicable to Specified Categories of Discharges

- 1. Existing Manufacturing, Commercial, Mining, and Silvicultural Discharges [40 CFR 122.42(a)]
 - a. In addition to the Standard Provisions in Sections A, B, and C, the above classes of dischargers must notify the RWQCB as soon as they know or have reason to believe:
 - That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels"'
 - (a) One hundred micrograms per liter (100 μ g/l);
 - (b) Two hundred micrograms per liter (200 μ g/l) for acrolein and acrylonitrile; five hundred micrograms per liter (500 μ g/l) for 2, 4- dinitrophenol and for 2-methyl-4, 6-dinitrophenol; and one milligram per liter (1 mg/l for antimony;
 - (c) Five (5) times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 CFR 122.21(g)(7); or
 - (d) The level established by the Regional Board in accordance with 40 CFR 122.44(f).
 - 2. That any activity has occurred or will occur which would result in any discharge, on a nonroutine or infrequent basis, of a toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels" '
 - (a) Five hundred micrograms per liter (500 $\mu g/l$)
 - (b) One milligram per liter (1 mg/l) for antimony;
 - (c) Ten (10) times the maximum concentration value reported for that pollutant in the

permit application in accordance with 40 CFR 122.21(g)(7).

- (d) The level established by the RWQCB in accordance with 40 CFR 122.44(f).
- 2. Publicly-Owned Treatment Works (POTW) [40 CFR 122.42(b)]
 - a. All POTWs must provide adequate notice to the RWQCB of the following:
 - (1) Any new introduction of pollutants into the POTW from an indirect discharger which would be subject to Section 301 or 306 of the CWA if it were directly discharging those pollutants; and any substantial change in the volume or character of pollutants being introduced into that POTW by a source introducing pollutants into the POTW at the time of issuance of the permit.
 - (2) For purposes of this section, adequate notice shall include information on the quality and quantity of effluent introduced into the POTW and any anticipated impact of the change on the quantity or quality of effluent to be discharged from the POTW.

Attachment 4 Standard Provisions

- 1. Review and revision of permit: Upon application by any affected person, or on its own motion, the SDRWQCB may review and revise this permit. [CWC 13263(e); also see <u>Provision F.2.e</u>, detailed in Attachment E]
- 2. Termination or modification of permit: This permit may be terminated or modified for causes, including, but not limited to, all of the following:
 - (a) Violation of any condition contained in this permit.
 - (b) Obtaining this permit by misrepresentation, or failure to disclose fully all relevant facts.
 - (c) A change in any condition that requires either a temporary of permanent reduction or elimination of the permitted discharge. [CWC 13381; also see <u>Provision F.2.g</u>, detailed in Attachment E
- 3. Material change: Not less than 180 days prior to any material change in the character, location, volume, or amount of waste discharge, the Discharger shall submit a technical report describing such changes. Such changes include but are not limited to the following:
 - (a) Addition of a major industrial waste discharge to a discharge of essentially domestic sewage, or the addition of a new process or product by an industrial facility resulting in a change in the character of the waste.
 - (b) Significant change in disposal method, e.g., change from land disposal to a direct discharge to water, or change in the method of treatment which would significantly alter the characteristics of the waste.
 - c) Significant change in the disposal area, e.g., moving the discharge to another drainage area, to a different water body, or to a disposal area significantly removed from the original area potentially causing different water quality or nuisance problems.
 - (d) Increase in flow beyond that specified in the waste discharge requirements.
 - (e) Increase in area or depth to be used for solid waste disposal beyond that specified in the waste discharge requirements. [CWC 13372, 13376, 13264, 23 CCR 2210]
 - (f) Any substantial change in the amount or characteristics of pollutants used, handled, stored, or generated.

(g) Any new discharge of pollutants or new potential pollutant source.

- (h) Other circumstances which could result in a material change in the character, amount, or location of discharges. [CWC 13372, 13264,23 CCR 2210]
- 4. Transfers: When this permit is transferred to a new owner or operator, such requirements as may be necessary under the California Water Code may be incorporated into this permit. (Also see <u>Provision F.2.d</u>, detailed in Attachment E.)
- 5. Conditions not stayed: The filing of a request by the Discharger for modification, revocation and reissuance, or termination of this Order, or a notification of planned change in or anticipated noncompliance with this Order does not stay any condition of this Order.
- 6. Monitoring and Reporting Program: The Discharger shall conduct monitoring and submit reports in accordance with Monitoring and Reporting Program (MRP)

 No. 99-72. Monitoring results shall be reported at the intervals specified in MRP

 No. 99-72. [CWC 13267 & 13383, 23 CCR 2230, 40 CFR 122.43(a),

 122.44(1)(4), 122.48]
- 7. Availability: A copy of this Order shall be kept at a readily accessible location and shall be available to on-site personnel at all times.
- 8. Duty to minimize or correct adverse impacts: The Discharger shall take all reasonable steps to minimize or correct any adverse impact on the environment resulting from noncompliance with this Order, including such accelerated or additional monitoring as may be necessary to determine the nature and impact of the noncompliance.
- 9. Responsibilities, liabilities, legal action, penalties: The Porter-Cologne Water Quality Control Act provides for civil and criminal penalties comparable to, and in some cases greater than, those provided for under the Clean Water Act. [CWC 13385, 13387]

Nothing in this Order shall be construed to protect the Discharger from its liabilities under federal, state, or local laws.

Except as provided for in 40 CFR 122.41(m) and (n), nothing in this Order shall be construed to relieve the Discharger from civil or criminal penalties for noncompliance.

Nothing in this Order shall be construed to preclude the institution of any legal action or relieve the Discharger from any responsibilities, liabilities, or penalties to which the Discharger is or may be subject to under Section 311 of the CWA.

Nothing in this Order shall be construed to preclude institution of any legal action or relieve the Discharger from any responsibilities, liabilities, or penalties established pursuant to any applicable state law or regulation under authoring preserved by Section 510 of the CWA.

- 10. Noncompliance: Any noncompliance with this permit constitutes violation of the California Water Code and is grounds for denial of an application for permit modification. (Also see 40 CFR 122.41 (a) in Attachment E)
- 11. Discharge is a privilege: No discharge of waste into waters of the state, whether or not the discharge is made pursuant to waste discharge requirements, shall create a vested right to continue the discharge. All discharges of waste into waters of the state are privileges, not rights. {CWC 13263(g)]
- 12. Permittee: For the purposes of this permit, the term "permittee" used in parts of 40 CFR incorporated into this permit by reference and/or applicable to this permit shall have the same meaning as the term "Discharger" used elsewhere in this permit.
- Director: For the purposes of this permit, the term "Director" used in parts of 40 CFR incorporated into this permit by reference and/or applicable to this permit shall have the same meaning as the term "SDRWQCB" used elsewhere in this permit, except that in 40 CFR 122.41(h) & (I), "Director" shall mean "SDRWQCB, SWRCB, and USEPA."
- 14. Effective date: This Order shall become effective ten days after the date of its adoption provided the USEPA Regional Administrator has no objection. If the Regional Administrator objects to its issuance, this Order shall not become effective until such objection is withdrawn.
- 15. Expiration: This Order expires November 10, 2004. [40 CFR 122.43, 122.44(h), 122.46]
- 16. Continuation of expired permit: After this permit expires, the terms and conditions of this permit are automatically continued pending issuance of a new permit if all requirements of the federal NPDES regulations on the continuation of expired permits are complied with. [40 CFR 122.6, 23 CCR 2235.4]
- 17. Applications: Any application submitted by the Discharger for reissuance or modification of this permit shall satisfy all applicable requirements specified in federal regulations as well as any additional requirements for submittal of a Report of Waste Discharge specified in the California Water Code and the California Code of Regulations.
- 18. Confidentiality: Except as provided for in 40 CFR 122.7, no information or documents submitter in accordance with or in application for this permit will be

- considered confidential, and all such information and documents shall be available for review by the public at the offices of the SDRWQCB.
- 19. Severability: The provisions of this order are severable, and if any provision of this order, or the application of any provisions of this order to any circumstance, is held invalid, the application of such provision to other circumstances and the remainder of this order shall not be affected thereby.
- 20. Discharge Monitoring Quality Assurance (DMQA) Program: Then Discharger shall conduct appropriate analyses on any sample provided by EPA as part of the SMQA program. The results of such analyses shall be submitted to EPA's SMQA manager. [SWRCB/USEPA 106 MOA]
- 21. Pollution, Contamination, Nuisance: The handling, transport, treatment, or disposal of waste or the discharge of waste to waters of the state in a manner which causes or threatens to cause a condition of pollution, contamination, or nuisance, as those terms are defined in CWC 13050, is prohibited.
- 22. Additional Reporting Requirements: [40 CFR 122.42(a)] In addition to the reporting requirements under Attachment E [40 CFR 122.41 (l)], all existing manufacturing, commercial, mining, and silvicultural discharges must notify the SDRWQCB as soon as they know or have reason to believe:
 - (1) That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant which is not limited in the permit, of that discharge will exceed the highest of the following "notification levels:"
 - (a) One hundred micrograms per liter (100 ug/l);
 - (b) Two hundred micrograms per liter (200 ug/l) for acrolein and acrylonitrile; five hundred micrograms per liter (500 ug/l) for 2, 4-dinitrophenol and for 2-methyl-4, 6-dinitrophenol; and one milligram per liter (1 mg/l) for antimony;
 - (c) The level established by the SDRWQCB in accordance with 40 CFR 122.44(f).
 - (2) That any activity has occurred or will occurred which would result in any discharge, on a non-routine or infrequent basis, of a toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels:"
 - (a) Five hundred micrograms per liter (500 ug/l)
 - (b) One milligram per liter (1 mg/l) for antimony;

- (c) Ten (10) times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 CFR 122.21(g)(7).
- (d) The level established by the SDRWQCB in accordance with 40 CFR 122.44(f).
- 23. Report Submittal: Reports and other documents required under this Order to shall be submitted to:

Surface Water Unit California Regional Water Quality Control Board San Diego Region 9771 Clairemont Mesa Boulevard, Suite A San Diego, California 92124-1324 Phone - (858) 467-2952 Fax - (858) 571-6972

ATTACHMENT 5 SECTIONS OF 40 CFR INCORPORATED BY REFERENCE

40 CFR 122.5 Effect of a permit.

40 CFR 122.5(a)

- (a) Applicable to State programs, see §123.25. 40 CFR 122.5(a)(1)
- (1) Except for any toxic effluent standards and prohibitions imposed under section 307 of the CWA and standards for sewage sludge use or disposal" under §405(d) of the CWA, compliance with a permit during its term constitutes compliance, for purposes of enforcement, with sections 301, 302, 306, 307, 318, 403, and 405(a)-(b) of CWA. However, a permit may be modified, revoked and reissued, or terminated during its term for cause as set forth in §§122.62 and 122.64.
- (2) Compliance with a permit condition which implements a particular "standard for sewage sludge use or disposal" shall be an affirmative defense in any enforcement action brought for a violation of that "standard for sewage sludge use or disposal" pursuant to sections 405(e) and 309 of the CWA.

 40 CFR 122.5(b)
- (b) Applicable to State programs, See §123.25. The issuance of a permit does not convey any property rights of any sort, or any exclusive privilege.

 40 CFR 122.5(c)
- (c) The issuance of a permit does not authorize any injury to persons or property or invasion of other private rights, or any infringement of State or local law or regulations. 40 CFR 122.21 Application for a permit (applicable to State programs, see §123.25).

40 CFR 122,21(a)

(a) Duty to apply. Any person who discharges or proposes to discharge pollutants or who owns or operates a "sludge- only facility" and who does not have an effective permit, except persons covered by general permits under §122.28, excluded under §122.3, or a user of a privately owned treatment works unless the Director requires otherwise under §122.44(m), shall submit a complete application (which shall include a BMP program if necessary under 40 CFR 125.102) to the Director in accordance with this section and part 124.

40 CFR 122.21(b)

- (b) Who applies? When a facility or activity is owned by one person but is operated by another person, it is the operator's duty to obtain a permit. 40 CFR 122.21(c)
- (c) Time to apply. 40 CFR 122.21(c)(1)

- (1) Any person proposing a new discharge, shall submit an application at least 180 days before the date on which the discharge is to commence, unless permission for a later date has been granted by the Director. Facilities proposing a new discharge of storm water associated with industrial activity shall submit an application 180 days before that facility commences industrial activity which may result in a discharge of storm water associated with that industrial activity. Facilities described under §122.26(b)(14)(x) shall submit applications at least 90 days before the date on which construction is to commence. Different submittal dates may be required under the terms of applicable general permits. Persons proposing a new discharge are encouraged to submit their applications well in advance of the 90 or 180 day requirements to avoid delay. See also paragraph (k) of this section and §122.26(c)(1)(i)(G) and (c)(1)(ii). New discharges composed entirely of storm water, other than those dischargers identified by §122.26(a)(1), shall apply for and obtain a permit according to the application requirements in §122.26(g).
- [§122.21(c)(1) amended at 60 FR 17957, April 7, 1995; 60 FR 40235, Aug. 7, 1995] 40 CFR 122.21(c)(2)
- (2) Permits under section 405(f) of CWA. 40 CFR 122.21(c)(2)(i)
- (i) Any existing "treatment works treating domestic sewage" required to have, or requesting site-specific pollutant limits as provided in 40 CFR part 503, must submit the permit application information required by paragraph (d)(3)(ii) of this section within 180 days after publication of a standard applicable to its sewage sludge use or disposal practice(s). After this 180 day period, "treatment works treating domestic sewage" may only apply for site-specific pollutant limits for good cause and such requests must be made within 180 days of becoming aware that good cause exists.

[New §122.21(c)(2)(i) added at 58 FR 9413, Feb. 19, 1993] 40 CFR 122.21(c)(2)(ii)

(ii) Any "treatment works treating domestic sewage" with a currently effective NPDES permit, not addressed under paragraph (c)(2)(i) of this section, must submit the application information required by paragraph (d)(3)(ii) of this section at the time of its next NPDES permit renewal application. Such information must be submitted in accordance with paragraph (d) of this section.

[Former §122.21(c)(2)(i) revised and redesignated as new (ii) at 58 FR 9413, Feb. 19, 1993]

40 CFR 122.21(c)(2)(iii)

(iii) Any other existing "treatment works treating domestic sewage" not addressed under paragraphs (c)(2)(i) or (ii) of this section must submit the information listed in paragraphs (c)(2)(iii)(A)>(A)-(E) of this section, to the Director within 1 year after publication of a standard applicable to its sewage sludge use or disposal practice(s). The Director shall determine when such "treatment works treating domestic sewage" must apply for a permit.

40 CFR 122.21(c)(2)(iii)(A)

- (A) Name, mailing address and location of the "treatment works treating domestic sewage;"
- 40 CFR 122.21(c)(2)(iii)(B)
- (B) The operator's name, address, telephone number, ownership status, and status as Federal, State, private, public or other entity; 40 CFR 122.21(c)(2)(iii)(C)
- (C) A description of the sewage sludge use or disposal practices (including, where applicable, the location of any sites where sewage sludge is transferred for treatment, use, or disposal, as well as the name of the applicator or other contractor who applies the sewage sludge to land, if different from the "treatment works treating domestic sewage," and the name of any distributors if the sewage sludge is sold or given away in a bag or similar enclosure for application to the land, if different from the "treatment works treating domestic sewage");
- 40 CFR 122.21(c)(2)(iii)(D)
- (D) Annual amount of sewage sludge generated, treated, used or disposed (dry weight basis); and 40 CFR 122.21(c)(2)(iii)(E)
- (E) The most recent data the "treatment works treating domestic sewage" may have on the quality of the sewage sludge.

[Former §122.21(c)(2)(ii) revised and redesignated as new (iii) at 58 FR 9413, Feb. 19, 1993]

40 CFR 122.21(c)(2)(iv)

(iv) Notwithstanding paragraphs (c)(2)(i), (ii), or (iii) of this section, the Director may require permit applications from any "treatment works treating domestic sewage" at any time if the Director determines that a permit is necessary to protect public health and the environment from any potential adverse effects that may occur from toxic pollutants in sewage sludge.

[New §122.21(c)(2)(iv) added at 58 FR 9413, Feb. 19, 1993] 40 CFR 122.21(c)(2)(v)

(v) Any "treatment works treating domestic sewage" that commences operations after promulgation of an applicable "standard for sewage sludge use or disposal" shall submit an application to the Director at least 180 days prior to the date proposed for commencing operations.

[Former §122.21(c)(2)(iii) redesignated as new (v) at 58 FR 9413, Feb. 19, 1993] 40 CFR 122.21(d)

- (d) Duty to reapply. 40 CFR 122.21(d)(1)
- (1) Any POTW with a currently effective permit shall submit a new application at least 180 days before the expiration date of the existing permit, unless permission for a later date has been granted by the Director. (The Director shall not grant permission for applications to be submitted later than the expiration date of the existing permit.) 40 CFR 122.21(d)(2)

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- (2) All other permittees with currently effective permits shall submit a new application 180 days before the existing permit expires, except that: 40 CFR 122.21(d)(2)(i)
- (i) The Regional Administrator may grant permission to submit an application later than the deadline for submission otherwise applicable, but no later than the permit expiration date; and 40 CFR 122.21(d)(3)
- (3) (i) All applicants for EPA-issued permits, other than POTWs, new sources, and "sludge-only facilities," must complete Forms 1 and either 2b or 2c of the consolidated permit application forms to apply under §122.21 and paragraphs (f), (g), and (h) of this section.

40 CFR 122.21(d)(3)(ii)

- (ii) In addition to any other applicable requirements in this part, all POTWs and other "treatment works treating domestic sewage," including "sludge-only facilities," must submit with their applications the information listed at 40 CFR 501.15(a)(2) within the time frames established in paragraph (c)(2) of this section.

 40 CFR 122.21(e)
- (e) Completeness. The Director shall not issue a permit before receiving a complete application for a permit except for NPDES general permits. An application for a permit is complete when the Director receives an application form and any supplemental information which are completed to his or her satisfaction. The completeness of any application for a permit shall be judged independently of the status of any other permit application or permit for the same facility or activity. For EPA administered NPDES programs, an application which is reviewed under §124.3 is complete when the Director receives either a complete application or the information listed in a notice of deficiency.

40 CFR 122.21(f)

- (f) Information requirements. All applicants for NPDES permits shall provide the following information to the Director, using the application form provided by the Director (additional information required of applicants is set forth in paragraphs (g) through (k) of this section).
- 40 CFR 122.21(f)(1)
- (1) The activities conducted by the applicant which require it to obtain an NPDES permit.
- 40 CFR 122.21(f)(2)
- (2) Name, mailing address, and location of the facility for which the application is submitted.
- 40 CFR 122.21(f)(3)
- (3) Up to four SIC codes which best reflect the principal products or services provided by the facility.
- 40 CFR 122.21(f)(4)